SEARCH REQUEST FORM

Access DB# \_

Scientific and Technical Information Center Examiner #! 7/299 (MI Results Format Preferred (circle). Mail Box and Bldg/Room Location: 2001, CM1 If more than one search is submitted, please prioritize searches in order of need. Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract. Title of Invention: Inventors (please provide full names): \_\_ Earliest Priority Filing Date: \_ \*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number. Point of contact:

BARB O'BRYEN
L'INFORMATION SPECIALIST TECH INFORMATION SPECIALIST

STAFF USE ONLY	Type of Search	Vendors and cost where applicable						
Searcher:	NA Sequence (#)	STN St 400 / tyr 222						
Searcher Phone #:	AA Sequence (#)	Dialog						
Searcher Location:	Structure (#)	Questel/Orbit						
Date Searcher Picked Up:	Bibliographic	Dr.Link						
Date Completed: 2-8-02	Litigation	Lexis/Nexis						
Searcher Prep & Review Time: 40 3		Sequence Systems						
Clerical Prep Time:	Patent Family	WWW/Internet						
Online Time: 41   63	Other	Other (specify) Chem Draw						

PTO-1590 (8-01)

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# 11:3 Page Blank (uspto)

## National Library of Medicine - Medical Subject Headings

## **2002 MeSH**

## **MeSH Descriptor Data**

## Return to Entry Page

MeSH Heading	Niacinamide
Tree Number	<u>D03.066.515.530</u>
Tree Number	D03.383.725.547.530
Tree Number	D11.786.708.547.565
Annotation	a B vitamin; / defic = probably PELLAGRA; / ther use: coord disease with / drug ther, not / diet ther
Scope Note	An important compound functioning as a component of the coenzyme NAD. Its primary significance is in the prevention and/or cure of blacktongue and PELLAGRA. Most animals cannot manufacture this compound in amounts sufficient to prevent nutritional deficiency and it therefore must be supplemented through dietary intake.
Entry Term	Nicotinamide
Entry Term	Vitamin B 3
Entry Term	Vitamin PP
Entry Term	3-Pyridinecarboxamide
Entry Term	Enduramide
Entry Term	Vitamin B3
Allowable Qualifiers	AA AD AE AG AI AN BI BL CF CH CL CS CT DF DU EC GE HI IM IP ME PD PH PK PO RE SD SE ST TO TU UR
CAS Type 1 Name	3-Pyridinecarboxamide
Registry Number	98-92-0
Online Note	use NIACINAMIDE to search NICOTINAMIDE 1966-92
History Note	93; was NICOTINAMIDE 1963-92; NIACINAMIDE was see NICOTINAMIDE 1963-92
Unique ID	D009536

## **MeSH Tree Structures**



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=> fil req FILE 'REGISTRY' ENTERED AT 12:35:49 ON 08 FEB 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 6 FEB 2002 HIGHEST RN 390354-99-1 DICTIONARY FILE UPDATES: 6 FEB 2002 HIGHEST RN 390354-99-1

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

The P indicator for Preparations was not generated for all of the CAS Registry Numbers that were added to the H/Z/CA/CAplus files between 12/27/01 and 1/23/02. Use of the P indicator in online and SDI searches during this period, either directly appended to a CAS Registry Number or by qualifying an L-number with /P, may have yielded incomplete results. As of 1/23/02, the situation has been resolved. Also, note that searches conducted using the PREP role indicator were not affected.

Customers running searches and/or SDIs in the H/Z/CA/CAplus files incorporating CAS Registry Numbers with the P indicator between 12/27/01 and 1/23/02, are encouraged to re-run these strategies. Contact the CAS Help Desk at 1-800-848-6533 in North America or 1-614-447-3698, worldwide, or send an e-mail to help@cas.org for further assistance or to receive a credit for any duplicate searches.

=> d ide

L8

ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS RN11032-50-1 REGISTRY (CA INDEX NAME) CN Vitamin PP (9CI) OTHER NAMES: Antipellagra vitamin CN CN Factor PP CN Nikasan CN Nikazan Pellagra preventive factor CN PP factor CN CN Vitamin H1 55600-01-6, 63748-44-7 DR MF Unspecified CI COM, MAN AGRICOLA, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CHEMLIST, LCSTN Files: CIN, EMBASE, IFICDB, IFIPAT, IFIUDB, PIRA, PROMT, TOXCENTER, TOXLIT, USPATFULL EINECS\*\* Other Sources: (\*\*Enter CHEMLIST File for up-to-date regulatory information)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

364 REFERENCES IN FILE CA (1967 TO DATE) 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA 364 REFERENCES IN FILE CAPLUS (1967 TO DATE)

1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> fil capl; d que 121; d que 128; d que 130;d que 131; d que 135; s 121 or 128 or 130 or 131 or 135

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FILE COVERS 1907 - 8 Feb 2002 VOL 136 ISS 7 FILE LAST UPDATED: 7 Feb 2002 (20020207/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

The P indicator for Preparations was not generated for all of the CAS Registry Numbers that were added to the CAS files between 12/27/01 and 1/23/02. As of 1/23/02, the situation has been resolved. Searches and/or SDIs in the H/Z/CA/CAplus files incorporating CAS Registry Numbers with the P indicator executed between 12/27/01 and 1/23/02 may be incomplete. See the NEWS message on this topic for more information.

L8 L9	368	SEA FILE=REGISTRY ABB=ON "VITAMIN PP"/CN SEA FILE=CAPLUS ABB=ON L8						
L10	682	SEA FILE=CAPLUS ABB=ON (VITAMIN OR FACTOR)(A)(PP OR PELLAGRA PREVENTIVE OR ANTIPELLAGRA)						
L11	191	SEA FILE=CAPLUS ABB=ON VITAMIN(L)(B3 OR B 3 OR H1 OR H 1)/OBI						
L12	3171	SEA FILE=CAPLUS ABB=ON NIACINAMID# OR NICORANDIL# OR NIKETHAMI						
		D# OR NIKA!AN OR ENDURAMID# OR PYRIDINECARBOXAMID#						
L13	9804	SEA FILE=CAPLUS ABB=ON CYTOPROTECT?						
L14	5841	SEA FILE=CAPLUS ABB=ON (SIDE OR ADVERSE)(W)(AFFECT? OR						
		EFFECT?)/OBI						
L15	126993	SEA FILE=CAPLUS ABB=ON ANTITUMOR AGENTS/CT OR NEOPLASM#(L)INHI						
		BITOR#/OBI						
L16	9007	SEA FILE=CAPLUS ABB=ON CHEMOTHERAPY+NT,OLD/CT						
L17	12145	SEA FILE=CAPLUS ABB=ON IMMUNOSUPPRESSANTS/CT						
L18	10635	SEA FILE=CAPLUS ABB=ON IMMUNOSUPPRESSION/CT						
L19	17507	SEA FILE=CAPLUS ABB=ON AUTOIMMUNE DISEASE+NT,OLD/CT						
L2,1	2	SEA-FILE=CAPLUS_ABB=ON (L9 OR-L10 OR L11 OR L12) AND L13 AND						
	(L14 OR L15 OR L16 OR L17 OR L18 OR L19)							

L8	1	SEA	FILE=REGIST	RY ABB=O	N "VITAMIN	PP"/CN		
L9	368	SEA	FILE=CAPLUS	ABB=ON	L8			
L10	682	SEA	FILE=CAPLUS	ABB=ON	(VITAMIN O	R FACTOR)(A)	(PP OR	PELLAGRA

L11	191	PREVENTIVE OR ANTIPELLAGRA) SEA FILE=CAPLUS ABB=ON VITAMIN(L)(B3 OR B 3 OR H1 OR H 1)/OBI
L12	3171	SEA FILE=CAPLUS ABB=ON NIACINAMID# OR NICORANDIL# OR NIKETHAMI
L27 L28-	1080	D# OR NIKA!AN OR ENDURAMID# OR PYRIDINECARBOXAMID# SEA FILE=CAPLUS ABB=ON (ORGAN# OR TISSUE#)(2A)PROTECT?/OBI SEA FILE=CAPLUS ABB=ON (L9 OR L10 OR L11 OR L12) AND L27
L8		SEA FILE=REGISTRY ABB=ON "VITAMIN PP"/CN
ь9 L10	682	SEA FILE=CAPLUS ABB=ON L8 SEA FILE=CAPLUS ABB=ON (VITAMIN OR FACTOR)(A)(PP OR PELLAGRA PREVENTIVE OR ANTIPELLAGRA)
L11	191	SEA FILE=CAPLUS ABB=ON VITAMIN(L)(B3 OR B 3 OR H1 OR H 1)/OBI
L12		SEA FILE=CAPLUS ABB=ON NIACINAMID# OR NICORANDIL# OR NIKETHAMI D# OR NIKA!AN OR ENDURAMID# OR PYRIDINECARBOXAMID#
L14		SEA FILE=CAPLUS ABB=ON (SIDE OR ADVERSE)(W)(AFFECT? OR EFFECT?)/OBI
L30		SEA FILE=CAPLUS ABB=ON L14 AND (L9 OR L10 OR L11 OR L12).
L8		SEA FILE=REGISTRY ABB=ON "VITAMIN PP"/CN
L9		SEA FILE=CAPLUS ABB=ON L8
L10	682	SEA FILE=CAPLUS ABB=ON (VITAMIN OR FACTOR) (A) (PP OR PELLAGRA
L11	191	PREVENTIVE OR ANTIPELLAGRA) SEA FILE=CAPLUS ABB=ON VITAMIN(L)(B3 OR B 3 OR H1 OR H 1)/OBI
L12	3171	SEA FILE=CAPLUS ABB=ON NIACINAMID# OR NICORANDIL# OR NIKETHAMI D# OR NIKA!AN OR ENDURAMID# OR PYRIDINECARBOXAMID#
L15	126993	SEA FILE=CAPLUS ABB=ON ANTITUMOR AGENTS/CT OR NEOPLASM#(L)INHI BITOR#/OBI
L16	9007	SEA FILE=CAPLUS ABB=ON CHEMOTHERAPY+NT,OLD/CT
L17		SEA FILE=CAPLUS ABB=ON IMMUNOSUPPRESSANTS/CT
L18	10635	SEA FILE=CAPLUS ABB=ON IMMUNOSUPPRESSION/CT
L19	17507	SEA FILE=CAPLUS ABB=ON AUTOIMMUNE DISEASE+NT,OLD/CT SEA FILE=CAPLUS ABB=ON CYTOPROTECT?/OBI SEA FILE=CAPLUS ABB=ON L23 AND (L9 OR L10 OR L11 OR L12)
L23	8082	SEA FILE=CAPLUS ABB=ON CYTOPROTECT?/OBI
L29	35	SEA FILE=CAPLUS ABB=ON L23 AND (L9 OR L10 OR L11 OR L12)
ــــــــــــــــــــــــــــــــــــــ	2	SEA FILE=CAPLUS ABB=ON L29 AND (L15 OR L16 OR L17 OR L18 OR L19)
	,	
L8		SEA FILE=REGISTRY ABB=ON "VITAMIN PP"/CN
L9 L10		SEA FILE=CAPLUS ABB=ON L8
LIO	682	SEA FILE=CAPLUS ABB=ON (VITAMIN OR FACTOR)(A)(PP OR PELLAGRA PREVENTIVE OR ANTIPELLAGRA)
L11	191	SEA FILE=CAPLUS ABB=ON VITAMIN(L)(B3 OR B 3 OR H1 OR H 1)/OBI
L12	3171	SEA FILE=CAPLUS ABB=ON NIACINAMID# OR NICORANDIL# OR NIKETHAMI D# OR NIKA!AN OR ENDURAMID# OR PYRIDINECARBOXAMID#
L14	5841	SEA FILE=CAPLUS ABB=ON (SIDE OR ADVERSE)(W)(AFFECT? OR EFFECT?)/OBI
L15	126993	SEA FILE=CAPLUS ABB=ON ANTITUMOR AGENTS/CT OR NEOPLASM#(L)INHI BITOR#/OBI
L16	9007	SEA FILE=CAPLUS ABB=ON CHEMOTHERAPY+NT,OLD/CT
L17		SEA FILE=CAPLUS ABB=ON IMMUNOSUPPRESSANTS/CT
L18	10635	SEA FILE=CAPLUS ABB=ON IMMUNOSUPPRESSION/CT
L19		SEA FILE=CAPLUS ABB=ON AUTOIMMUNE DISEASE+NT,OLD/CT
L23		SEA FILE=CAPLUS ABB=ON CYTOPROTECT?/OBI
L24	18	SEA FILE=CAPLUS ABB=ON (L9 OR L10 OR L11 OR L12)(L)L23

L25 9 SEA FILE=CAPLUS ABB=ON (L9 OR L10 OR L11 OR L12)(L)(L14 OR L15 OR L16 OR L17 OR L18 OR L19) L35 1 SEA FILE=CAPLUS ABB=ON (L24 OR L25) AND LUNG#/TI

L114 --- 7 L21 OR L28 OR L30 OR L31 OR L35

=> fil medl; d que 138; d que 144; d que 152; s 138 or 144 or 152 (FILE MEDLINE' ENTERED AT 15:22:58 ON 08 FEB 2002

FILE LAST UPDATED: 7 FEB 2002 (20020207/UP). FILE COVERS 1958 TO DATE.

On April 22, 2001, MEDLINE was reloaded. See HELP RLOAD for details.

MEDLINE now contains IN-PROCESS records. See HELP CONTENT for details.

MEDLINE is now updated 4 times per week. A new current-awareness alert frequency (EVERYUPDATE) is available. See HELP UPDATE for more information.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2001 vocabulary. Enter HELP THESAURUS for details.

The OLDMEDLINE file segment now contains data from 1958 through 1965. Enter HELP CONTENT for details.

Left, right, and simultaneous left and right truncation are available in the Basic Index. See HELP SFIELDS for details.

THIS FILE CONTAINS CAS REGISTRY NUMBERS FOR EASY AND ACCURATE SUBSTANCE IDENTIFICATION.

L36	4894	SEA	FILE=MEDLINE	ABB=ON	NIACINAMIDE+NT/CT
L37	332	SEA	FILE=MEDLINE	ABB=ON	CYTOPROTECTION/CT
_L38-	1	SEA	FILE=MEDLINE	ABB=ON	L36 AND L37

L36 L39	4894 SE 703853 SE	EA FILE=MEDLINE ABB=ON EA FILE=MEDLINE ABB=ON	NIACINAMIDE+NT/CT AE/CT - Subheading - Advisse effects
644	DI		agento

L36	4894	SEA	FILE=MEDLINE	ABB=ON	NIACINAMIDE+NT/CT
L46	167976	SEA	FILE=MEDLINE	ABB=ON	D22./CT
L48	2630	SEA	FILE=MEDLINE	ABB=ON	L36/MAJ
L49	117511	SEA	FILE=MEDLINE	ABB=ON	L46/MAJ
L51	87589	SEA	FILE=MEDLINE		DRUG INTERACTIONS+NT/CT
L52-	6	SEA	FILE=MEDLINE	ABB=ON	L48 AND L49 AND L51

L115 11 L38 OR L44 OR L52

=> fil embase; d que 167; fil wpids; d que 181; d que 182; s 181 or 182 FILE 'EMBASE' ENTERED AT 15:23:19 ON 08 FEB 2002 COPYRIGHT (C) 2002 Elsevier Science B.V. All rights reserved.

FILE COVERS 1974 TO 7 Feb 2002 (20020207/ED)

EMBASE has been reloaded. Enter HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
L53
           3465 SEA FILE=EMBASE ABB=ON NICOTINAMIDE/CT
        198560 SEA FILE=EMBASE ABB=ON
L54
                                        IMMUNOSUPPRESSIVE AGENT+NT/CT
L55
        462824 SEA FILE=EMBASE ABB=ON
                                        ANTINEOPLASTIC AGENT+NT/CT
                                       (L54 OR L55) (L) TO/CT - Subheading To = toxicity
L60
          16504 SEA FILE=EMBASE ABB=ON
L61
             31 SEA FILE=EMBASE ABB=ON
                                       L60 AND L53
          7328 SEA FILE=EMBASE ABB=ON
L62
                                       CELL PROTECTION/CT
          15037 SEA FILE=EMBASE ABB=ON
L63
                                       CELL SURVIVAL/CT
L64
         18900 SEA FILE=EMBASE ABB=ON
                                       CELL DEATH/CT
L65
          42038 SEA FILE=EMBASE ABB=ON
                                       CYTOTOXICITY/CT
L66
           876 SEA FILE=EMBASE ABB=ON
                                       ACUTE TOXICITY/CT
567
              5 SEA FILE=EMBASE ABB=ON
                                       L61 AND (L62 OR L63 OR L64 OR L65 OR
                L66)
```

FILE 'WPIDS' ENTERED AT 15:23:19 ON 08 FEB 2002 COPYRIGHT (C) 2002 DERWENT INFORMATION LTD

FILE LAST UPDATED: 04 FEB 2002 <20020204/UP>
MOST RECENT DERWENT UPDATE 200208 <200208/DW>
DERWENT\_WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

- >>> SDI'S MAY BE RUN ON EVERY UPDATE OR MONTHLY AS OF JUNE 2001. (EVERY UPDATE IS THE DEFAULT). FOR PRICING INFORMATION SEE HELP COST <<<
- >>> FOR UP-TO-DATE INFORMATION ABOUT THE DERWENT CHEMISTRY RESOURCE, PLEASE VISIT http://www.derwent.com/chemistryresource/index.html <<<
- >>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES,
  SEE http://www.derwent.com/dwpi/updates/dwpicov/index.html <<<

L10	682	SEA FILE=CAPLUS ABB=ON (VITAMIN OR FACTOR) (A) (PP OR PELLAGRA
		PREVENTIVE OR ANTIPELLAGRA)
L12	3171	SEA FILE=CAPLUS ABB=ON NIACINAMID# OR NICORANDIL# OR NIKETHAMI
		D# OR NIKA!AN OR ENDURAMID# OR PYRIDINECARBOXAMID#
L70	4346	SEA FILE=WPIDS ABB=ON (CYTO OR CELL? OR ORGAN# OR TISSUE#)(2A)
		PROTECT? OR CYTOPROTECT?
L73	104	SEA FILE=WPIDS ABB=ON VITAMIN(W) (B3 OR B 3 OR H1 OR H 1)
L74	367	SEA FILE=WPIDS ABB=ON L10 OR L12
L80	1777	SEA FILE=WPIDS ABB=ON NICOTINAMID#
4-8-1-	12	SEA-FILE=WPIDS ABB=ON (L73 OR L74 OR L80)(P)L70.

L10	682	SEA FILE=CAPLUS ABB=ON (VITAMIN OR FACTOR) (A) (PP OR PELLAGRA
		PREVENTIVE OR ANTIPELLAGRA)
L12	3171	SEA FILE=CAPLUS ABB=ON NIACINAMID# OR NICORANDIL# OR NIKETHAMI
		D# OR NIKA!AN OR ENDURAMID# OR PYRIDINECARBOXAMID#
L70	4346	SEA FILE=WPIDS ABB=ON (CYTO OR CELL? OR ORGAN# OR TISSUE#)(2A)
		PROTECT? OR CYTOPROTECT?
L73	104	SEA FILE=WPIDS ABB=ON VITAMIN(W) (B3 OR B 3 OR H1 OR H 1)
L74	367	SEA FILE=WPIDS ABB=ON L10 OR L12
L76	7334	SEA FILE=WPIDS ABB=ON IMMUNOSUPPRES? OR IMMUNO SUPPRES?
L77	2049	SEA FILE=WPIDS ABB=ON ANTINEOPLAS? OR ANTI NEOPLAS?

Page 7

L78 5237 SEA FILE=WPIDS ABB=ON CHEMOTHERAP? T.80 1777 SEA FILE=WPIDS ABB=ON NICOTINAMID#

L82 2 SEA FILE=WPIDS ABB=ON (L73 OR L74 OR L80) AND L70 AND (L76 OR L77 OR L78)

L116 12 L81 OR L82 ·

=> dup rem 1115,1114,167,1116 .

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FILE 'CAPLUS' ENTERED AT 15:23:51 ON 08 FEB 2002

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FILE 'WPIDS' ENTERED AT 15:23:51 ON 08 FEB 2002

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PROCESSING COMPLETED FOR L115

PROCESSING COMPLETED FOR L114

PROCESSING COMPLETED FOR L67

PROCESSING COMPLETED FOR L116

L117 33 DUP REM L115 L114 L67 L116 (2 DUPLICATES REMOVED) .

ANSWERS '1-11' FROM FILE MEDLINE ANSWERS '12-18' FROM FILE CAPLUS ANSWERS '19-22' FROM FILE EMBASE

ANSWERS '23-33' FROM FILE WPIDS

c => d ibib ab hitrn 1117 1-33 \*

L117 ANSWER 1 OF 33 MEDLINE DUPLICATE 1

ACCESSION NUMBER:

2001035541 MEDLINE

DOCUMENT NUMBER:

20508272 PubMed ID: 11053552

TITLE:

Efficient protection of human bronchial epithelial cells against sulfur and nitrogen mustard cytotoxicity using drug

combinations.

AUTHOR:

Rappeneau S; Baeza-Squiban A; Marano F; Calvet J

CORPORATE SOURCE:

Laboratoire de Cytophysiologie et Toxicologie Cellulaire, Universite Paris VII Denis-Diderot, Tour 53-54, E3 case 7073, 2 place Jussieu, 75251 Paris cedex 05, France..

rappeneau@paris7.jussieu.fr

SOURCE:

TOXICOLOGICAL SCIENCES, (2000 Nov) 58 (1) 153-60.

Journal code: CZ1. ISSN: 1096-6080.

PUB. COUNTRY:

United States

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

English

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

200011

ENTRY DATE:

Entered STN: 20010322

Last Updated on STN: 20010322 Entered Medline: 20001130

The aim of this study was to test the efficacy of several candidate AB molecules against sulfur mustard (SM) and nitrogen mustard (HN2) using a human bronchial-epithelial cell line (16HBE14o-). Candidate molecules were chosen on the basis of the known cytotoxicity mechanisms of mustards or their efficacy previously observed on other cellular models. It included the sulfhydryl-containing molecules N-acetyl-cysteine (NAC) and WR-1065, the nucleophile hexamethylenetetramine (HMT), the energy-level stabilizer niacinamide (NC), the antioxidant dimethylthiourea (DMTU), L-arginine

Page 8

analogues such as L-thiocitrulline (L-TC) and L-nitroarginine methyl ester (L-NAME), and the anti-gelatinase doxycycline (DOX). Their efficacy was determined using 2-(4-[3-iodophenyl)-3-(4-nitrophenyl)-5-(2,4-disulfophenyl)-2Htetrazolium (WST-1) reduction by viable cells 24 h after initial exposure to 100 microM HN2 or SM. On individual immediate cotreatment, some molecules exhibited selective protection against only one mustard, such as DMTU and WR-1065 against HN2 and DOX against SM, whereas NAC and L-TC were effective against both SM and HN2 cytotoxicity. However, as the level of protection against SM was always weak compared to HN2, several combinations were investigated against SM to improve the protection. The effective combinations (L-TC + DOX, NAC + DOX, NAC + DMTU, NAC + HMT, NC + DOX) combined agents, reducing the bioavailability of the mustard with compounds possibly acting on the consequences of alkylation. One of these combinations, NAC + DOX, appeared to be the most interesting, as these agents are already used in human therapy. It exhibited good efficacy in delayed cotreatment (up to 90 min) against SM.

L117 ANSWER 2 OF 33 MEDLINE

ACCESSION NUMBER: 2000159068 MEDLINE

DOCUMENT NUMBER: 20159068 PubMed ID: 10692493

TITLE: Effect of 6-aminonicotinamide and other protein synthesis

inhibitors on formation of platinum-DNA adducts and

cisplatin sensitivity.

AUTHOR: Budihardjo I I; Boerner S A; Eckdahl S; Svingen P A; Rios

R; Ames M M; Kaufmann S H

CORPORATE SOURCE: Division of Oncology Research, Mayo Medical School,

Rochester, Minnesota, USA.

CONTRACT NUMBER: NO1-CM57200 (NCI)

RO1-CA67818 (NCI)

SOURCE: MOLECULAR PHARMACOLOGY, (2000 Mar) 57 (3) 529-38.

Journal code: NGR; 0035623. ISSN: 0026-895X.

PUB. COUNTRY: United States

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200004

ENTRY DATE: Entered STN: 20000421

Last Updated on STN: 20000421 Entered Medline: 20000410

AB The present study was undertaken to examine the mechanistic basis for the recent observation that the pyridine nucleotide derivative 6-aminonicotinamide (6AN, NSC 21206) enhances the accumulation and resulting cytotoxicity of cisplatin in a variety of tumor cell lines. When A549 lung cancer cells or K562 leukemia cells were treated with 62.5 &mgr; M 6AN for 21 h and then pulse-labeled with [(35)S]methionine for 1 h, increased labeling of five polypeptides, one of which corresponded to a M(r) approximately 78,000 glucose-regulated protein (GRP78), was observed. Two subsequent observations, however, suggested that up-regulation of these polypeptides was unlikely to explain the interaction between 6AN and cisplatin: 1) the concentration of 6AN required to induce GRP78 was 4-fold higher than the dose required to sensitize cells to cisplatin; and 2) simultaneous treatment of cells with 6AN and cycloheximide prevented the increase in GRP78 but not the sensitizing effect of 6AN. On the contrary, treatment with the protein synthesis inhibitors cycloheximide, anisomycin, or puromycin as well as prolonged exposure to the RNA synthesis inhibitor actinomycin D mimicked the biochemical modulating effects of 6AN on cisplatin action. Conversely, 6AN inhibited protein synthesis, whereas 18 6AN analogs that failed to enhance Pt-DNA adducts and cisplatin cytotoxicity failed to inhibit protein synthesis. These observations are consistent with a model in which 6AN and other inhibitors of protein synthesis act as modulating agents by increasing cisplatin accumulation, thereby enhancing the formation of Pt-DNA adducts and subsequent cisplatin-induced cell death.

L117 ANSWER 3 OF 33 MEDLINE

ACCESSION NUMBER: 1998177604 MEDLINE

DOCUMENT NUMBER: 98177604 PubMed ID: 9516960

TITLE: 6-Aminonicotinamide sensitizes human tumor cell lines to

cisplatin.

AUTHOR: Budihardjo I I; Walker D L; Svingen P A; Buckwalter C A;

Desnoyers S; Eckdahl S; Shah G M; Poirier G G; Reid J M;

Ames M M; Kaufmann S H

CORPORATE SOURCE: Division of Oncology Research, Mayo Clinic, Rochester,

Minnesota 55905, USA.

CONTRACT NUMBER: N01-CM57200 (NCI)

R01-CA67818 (NCI)

SOURCE: CLINICAL CANCER RESEARCH, (1998 Jan) 4 (1) 117-30.

Journal code: C2H; 9502500. ISSN: 1078-0432.

PUB. COUNTRY: United States

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199804

ENTRY DATE: Entered STN: 19980416

Last Updated on STN: 19980416 Entered Medline: 19980409

The nicotinamide analogue 6-aminonicotinamide (6AN) is presently AΒ undergoing evaluation as a potential modulator of the action of various antineoplastic treatments. Most previous studies of this agent have focused on a three-drug regimen of chemical modulators that includes 6AN. In the present study, the effect of single-agent 6AN on the efficacy of selected antineoplastic drugs was assessed in vitro. Colony-forming assays using human tumor cell lines demonstrated that pretreatment with 30-250 microM 6AN for 18 h resulted in increased sensitivity to the DNA cross-linking agent cisplatin, with 6-, 11-, and 17 fold decreases in the cisplatin dose that diminishes colony formation by 90% being observed in K562 leukemia cells, A549 non-small cell lung cancer cells, and T98G glioblastoma cells, respectively. Morphological examination revealed increased numbers of apoptotic cells after treatment with 6AN and cisplatin compared to cisplatin alone. 6AN also sensitized cells to melphalan and nitrogen mustard but not to chlorambucil, 4-hydroperoxycyclophosphamide, etoposide, or daunorubicin. In additional studies undertaken to elucidate the mechanism underlying the sensitization to cisplatin, atomic absorption spectroscopy revealed that 6AN had no effect on the rate of removal of platinum (Pt) adducts from DNA. Instead, 6AN treatment was accompanied by an increase in Pt-DNA adducts that paralleled the degree of sensitization. This effect was not attributable to 6AN-induced decreases in glutathione or NAD+, because other agents that depleted these detoxification cofactors (buthionine sulfoximine and 3-acetylpyridine, respectively) did not increase Pt-DNA adducts. On the contrary, 6AN treatment increased cellular accumulation of cisplatin. Further experiments revealed that 6AN was metabolized to 6-aminonicotinamide adenine dinucleotide (6ANAD+). Concurrent administration of nicotinamide and 6AN had minimal effect on cellular 6AN accumulation but abolished the formation of 6ANAD+, the increase in Pt-DNA adducts, and the sensitizing effect of 6AN in clonogenic assays. These observations identify 6AN as a potential modulator of cisplatin sensitivity and suggest that the 6AN metabolite 6ANAD+ exerts this effect by increasing cisplatin accumulation and subsequent formation of Pt-DNA adducts.

L117 ANSWER 4 OF 33 MEDLINE

ACCESSION NUMBER: 97471114 MEDLINE

DOCUMENT NUMBER: 97471114 PubMed ID: 9330055

TITLE: Pellagra, azathioprine and inflammatory bowel disease.

AUTHOR: Jarrett P; Duffill M; Oakley A; Smith A

CORPORATE SOURCE: Department of Dermatology, Health Waikato, Hamilton, New

Zealand.

SOURCE: CLINICAL AND EXPERIMENTAL DERMATOLOGY, (1997 Jan) 22 (1)

44-5.

Journal code: DDU; 7606847. ISSN: 0307-6938.

PUB. COUNTRY: ENGLAND: United Kingdom

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199710

ENTRY DATE: Entered STN: 19971224

Last Updated on STN: 19971224 Entered Medline: 19971024

L117 ANSWER 5 OF 33 MEDLINE

ACCESSION NUMBER: 93080655 MEDLINE

DOCUMENT NUMBER: 93080655 PubMed ID: 1449531

TITLE: Potentiation of CB 1954 cytotoxicity by reduced pyridine

nucleotides in human tumour cells by stimulation of DT

diaphorase activity.

AUTHOR: Friedlos F; Biggs P J; Abrahamson J A; Knox R J

CORPORATE SOURCE: Molecular Pharmacology Unit, Institute of Cancer Research,

Sutton, Surrey, U.K.

SOURCE: BIOCHEMICAL PHARMACOLOGY, (1992 Nov 3) 44 (9) 1739-43.

Journal code: 9Z4; 0101032. ISSN: 0006-2952.

PUB. COUNTRY: ENGLAND: United Kingdom

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199212

ENTRY DATE: Entered STN: 19930129

Last Updated on STN: 19970203 Entered Medline: 19921230

AB The toxicity of CB 1954 [5-(aziridin-1-yl)-2,4-dinitrobenzamide] towards human cells was greatly enhanced by NADH (when foetal calf serum was present in the culture medium) and by nicotinamide riboside (reduced) (NRH), but not by nicotinate riboside (reduced). Co-treatment of human cells with CB 1954 and NADH resulted in the formation of crosslinks in their DNA. The toxicity produced by other DNA crosslinking agents was unaffected by reduced nicotinamide compounds. When caffeine was included in the medium, a reduction in the cytotoxicity of CB 1954 occurred. The toxicity experienced by human cell lines after exposure to CB 1954 and NADH was proportional to their levels of the enzyme DT diaphorase NAD(P)H dehydrogenase (quinone), EC 1.6.99.2. It is concluded that NRH, which we have shown to be a co-factor for rat DT diaphorase (Friedlos et al., Biochem Pharmacol 44: 25-31, 1992), is generated from NADH by enzymes in foetal calf serum, and stimulates the activity of human DT diaphorase towards CB 1954.

L117 ANSWER 6 OF 33 MEDLINE

ACCESSION NUMBER: 89147244 MEDLINE

DOCUMENT NUMBER: 89147244 PubMed ID: 2521968

TITLE: [Anticarcinogenic action of vitamins PP and B6 in the

natulan initiation of malignant growth in mice]. Antikantserogennoe deistvie vitaminov PP i B6 pri initsiatsii natulanom zlokachestvennogo rosta u myshei.

AUTHOR: Draudin-Krylenko V A; Bukin Iu V; Nikonova T V

SOURCE: VOPROSY ONKOLOGII, (1989) 35 (1) 34-8.

Journal code: XJU; 0413775. ISSN: 0507-3758.

PUB. COUNTRY: USSR

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: Russian

FILE SEGMENT: Priority Journals

ENTRY MONTH:

198903

ENTRY DATE:

Entered STN: 19900306

Last Updated on STN: 19900306 Entered Medline: 19890329

AB Parenteral administration of vitamins PP and B6 at the initiation stage of natulan-induced carcinogenesis was shown to significantly inhibit formation of lung adenomas. The preventive effect was found to depend on treatment schedule. Biochemical aspects of anticarcinogenic action of the vitamins require special investigation.

MEDLINE L117 ANSWER 7 OF 33

ACCESSION NUMBER: 89003401 MEDLINE

89003401 PubMed ID: 2971467 DOCUMENT NUMBER:

Potentiation of the antitumor activity of cisplatin in mice TITLE:

by 3-aminobenzamide and nicotinamide.

AUTHOR: Chen G; Pan Q C

CORPORATE SOURCE: Department of Anticancer Drug Research, Sun Yat-sen

University of Medical Sciences, Guangzhou, People's

Republic of China.

CANCER CHEMOTHERAPY AND PHARMACOLOGY, (1988) 22 (4) 303-7. SOURCE:

> Journal code: C9S; 7806519. ISSN: 0344-5704. GERMANY, WEST: Germany, Federal Republic of

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

Priority Journals FILE SEGMENT:

ENTRY MONTH:

PUB. COUNTRY:

198811 Entered STN: 19900308 ENTRY DATE:

> Last Updated on STN: 19970203 Entered Medline: 19881118

AB 3-Aminobenzamide (3AB) and nicotinamide (NA), inhibitors of adenosine-ribose transferase (ADPRT), potentiated the antitumor activity of cisplatin (DDP) on Ehrlich ascites carcinoma in mice. The mean survival times of the mice increased from 21.2-37.0 days in DDP-treated groups to 47.0-54.6 days in mice treated with DDP plus NA or 3AB. These drugs also potentiated DDP antitumor activity on sarcoma 180, with the inhibition rates increasing from 12.4%-20.8% in groups treated daily with DDP to 29.8%-46.4% in those treated with DDP plus NA or 3AB; however, neither 3AB nor NA alone showed any antitumor activity. The single-dose lethality of DDP on mice was partially reversed by either NA or 3AB. The pathological study revealed that the morphologic changes in the proximal tubules 1 month after a single dose of DDP (10 mg/kg) were partially prevented by a single protective dose (5 mmol/kg) of NA or 3AB. Our results suggest that the combination of DDP with ADPRT inhibitors might be used clinically in the future.

L117 ANSWER 8 OF 33 MEDLINE

87297218 ACCESSION NUMBER: MEDLINE

87297218 PubMed ID: 2956917 DOCUMENT NUMBER:

[Drug-induced pellagroid erythema. A case of pellagroid TITLE:

erythema caused by isoniazide].

Les erythemes pellagroides medicamenteux. Une observation

d'erytheme pellagroide secondaire a l'isoniazide. Schmutz J L; Cuny J F; Trechot P; Weber M; Beurey J

AUTHOR: SOURCE:

ANNALES DE DERMATOLOGIE ET DE VENEREOLOGIE, (1987) 114 (4)

569-76.

Journal code: 5RC; 7702013. ISSN: 0151-9638.

PUB. COUNTRY: France

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: French

FILE SEGMENT: Priority Journals

ENTRY MONTH: 198709

ENTRY DATE: Entered STN: 19900305

Last Updated on STN: 19900305

Entered Medline: 19870903

L117 ANSWER 9 OF 33 MEDLINE

ACCESSION NUMBER: 72027726 MEDLINE

DOCUMENT NUMBER: 72027726 PubMed ID: 4329781

Notes on streptozotocin in metastatic insulinoma. TITLE:

AUTHOR: Vogel T T

SOURCE: JOURNAL OF SURGICAL ONCOLOGY, (1971) 3 (5) 481-5.

Journal code: K79; 0222643. ISSN: 0022-4790.

PUB. COUNTRY: United States

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

197201 ENTRY MONTH:

ENTRY DATE: Entered STN: 19900310

> Last Updated on STN: 19900310 Entered Medline: 19720105

MEDLINE L117 ANSWER 10 OF 33

69061901 ACCESSION NUMBER: MEDITNE

DOCUMENT NUMBER: 69061901 PubMed ID: 4235759

TITLE: Plasma glucose levels in normal and adrenalectomized mice

treated with streptozotocin and nicotinamide.

AUTHOR: Schein P S; Bates R W

SOURCE: DIABETES, (1968 Dec) 17 (12) 760-5.

Journal code: E8X; 0372763. ISSN: 0012-1797.

PUB. COUNTRY: United States

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals

196902 ENTRY MONTH:

ENTRY DATE: Entered STN: 19900101

> Last Updated on STN: 19900101 Entered Medline: 19690204

L117 ANSWER 11 OF 33 MEDLINE

ACCESSION NUMBER: 68134825 MEDLINE

PubMed ID: 4295475 DOCUMENT NUMBER: 68134825

TITLE: The use of nicotinamide to modify the toxicity of

streptozotocin diabetes without loss of antitumor activity.

AUTHOR: Schein P S; Cooney D A; Vernon M L

SOURCE: CANCER RESEARCH, (1967 Dec) 27 (12) 2324-32.

Journal code: CNF; 2984705R. ISSN: 0008-5472.

PUB. COUNTRY: United States

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 196804

ENTRY DATE: Entered STN: 19900101

> Last Updated on STN: 19900101 Entered Medline: 19680411

L117 ANSWER 12 OF 33 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 2

ACCESSION NUMBER: 1991:550409 CAPLUS

DOCUMENT NUMBER: 115:150409

TITLE: Hydroxyl radical removers containing

> nicorandil (salts) and their uses as pharmaceuticals, organ protecting agents, and organ preservatives

INVENTOR(S): Fujita, Juzo

PATENT ASSIGNEE(S): Chugai Pharmaceutical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 03101621 A2 19910426 JP 1989-238604 19890914

JP 2843611 B2 19990106

OH radical removers, useful for treatment of OH radical-caused diseases (tumors, radical-induced disorders, inflammation, etc.), protection of OH radical-susceptible organs, and preservation of organs in transplantation, contain N-(2-hydroxyethyl)nicotinamide nitrate (nicorandil; I) or its salts as active ingredients. I at 10-6 M removed .apprx.50% OH radical, vs. .apprx.0%, for mannitol at 10-5 M.

L117 ANSWER 13 OF 33 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2000:688007 CAPLUS

DOCUMENT NUMBER: 133:261543

TITLE: Organ arrest, protection and

preservation with a potassium channel opener or agonist, an adenosine receptor agonist, and a local

anesthetic

INVENTOR(S): Dobson, Geoffrey Phillip

PATENT ASSIGNEE(S): James Cook University, Australia

SOURCE: PCT Int. Appl., 74 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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PATENT NO. KIND DATE
                                  APPLICATION NO. DATE
    WO 2000056145 A1 20000928 WO 2000-AU226 20000322
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
            CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
            ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
            LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
            SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA,
            ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
            DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
            CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                    A1 20020109 EP 2000-910414
                                                        20000322
    EP 1168912
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
PRIORITY APPLN. INFO.:
                                     AU 1999-9414
                                                    A 19990323
                                     AU 1999-4199
                                                    A 19991123
                                     WO 2000-AU226 W 20000322
```

AB A method is provided for arresting, protecting and/or preserving an organ which includes administering effective amts. of (i) a potassium channel opener or agonist and/or an adenosine receptor agonist and (ii) local anesthetic to a subject in need thereof. Also provided is a method for arresting, protecting and/or preserving an organ which comprises adding a compn. which includes effective amts. of (i) a potassium channel opener or agonist and/or an adenosine receptor agonist and (ii) a local anesthetic to the organ. The invention further provides a pharmaceutical or veterinary compn. which includes effective amts. of (i) a potassium channel opener or agonist and/or an adenosine receptor agonist and (ii) a local anesthetic.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L117 ANSWER 14 OF 33 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
                         1999:690954 CAPLUS
DOCUMENT NUMBER:
                         131:307106
TITLE:
                         Use of vitamin PP compounds as
                         cytoprotective agents in chemotherapy
INVENTOR(S):
                         Biedermann, Elfi; Hasmann, Max; Loser, Roland; Rattel,
                         Benno; Reiter, Friedemann; Schein, Barbara;
                         Schemainda, Isabel; Seibel, Klaus; Vogt, Klaus; Wosikowski, Katja
PATENT ASSIGNEE(S):
                         Klinge Pharma GmbH, Germany
                         PCT Int. Appl., 145 pp.
SOURCE:
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                      KIND
                            DATE
                                           APPLICATION NO.
                                                            DATE
                                                           19990421
     WO 9953920
                            19991028
                                           WO 1999-EP2686
                     A1
            AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
             DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,
             JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
             MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
             TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
             MD, RU,
                     TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
             ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
             CI, CM,
                    GA, GN, GW, ML, MR, NE, SN, TD, TG
                                           DE 1998-19818044 19980422
     DE 19818044
                       A1
                           19991028
                            20000830
                                           EP 1999-103814
     EP 1031564
                       Α1
                                                             19990226
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     AU 9939282
                       Α1
                            19991108
                                           AU 1999-39282
                                                             19990421
     EP 1079832
                            20010307
                                           EP 1999-922119
                                                             19990421
                       A1
         R:
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI
     WO 2000050399
                      A1
                           20000831
                                           WO 2000-EP1628
                                                            20000228
             AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     EP 1154998
                       A1
                           20011121
                                           EP 2000-907642
                                                             20000228
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
PRIORITY APPLN. INFO.:
                                         DE 1998-19818044 A 19980422
                                         EP 1999-103814 A
                                                            19990226
                                         WO 1999-EP2686
                                                         W
                                                            19990421
                                         WO 2000-EP1628
                                                          W
                                                            20000228
OTHER SOURCE(S):
                         MARPAT 131:307106
     The invention relates to the use of vitamin PP compds.
     and/or compds. with anti-pellagra activity such as for example nicotinic
     acid (niacin), and nicotinamide (niacin-amide, vitamin
     PP, vitamin B3) for the redn., elimination or prevention
     of side-effects of different degrees as well as for neutralization of
     acute side-effects in immunosuppressive or cancerostatic chemotherapy or
     diagnosis, esp. with substituted pyridine carboxamides, as well as
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combination medicaments with an amt. of compds. with vitamin B3 and/or

anti-pellagra activity and chemotherapeutic agents are esp. considered in the mentioned chemotherapies and indications. Nicotinamide at 500~mg/kg twice daily protected mice treated i.p. with antitumor N-[4-(1-diphenylmethylpiperidin-4-yl)butyl]-3-(pyridin-3-yl)propionamide. There were no deaths in the nicotinamide-treated mice and the strong redn. of leukocytes was completely prevented.

IT 11032-50-1, Vitamin PP

RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(vitamin PP compds. as cytoprotective

agents in chemotherapy)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L117 ANSWER 15 OF 33 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:620824 CAPLUS
DOCUMENT NUMBER: 121:220824
TITLE: Nicorandil

AUTHOR(S): Fukami, Kenichi; Hiramori, Katsuhiko CORPORATE SOURCE: Iwate Med. Univ., Morioka, 020, Japan Card. Pract. (1994), 5(3), 381-3

CODEN: CARPEM; ISSN: 0915-874X

DOCUMENT TYPE: Journal; General Review

LANGUAGE: Japanese

AB A review, with 4 refs., on the pharmacol., indications, dosage regimen, clin. efficacy, side effects, and use directions of nicorandil.

L117 ANSWER 16 OF 33 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1994:86430 CAPLUS

DOCUMENT NUMBER: 120:86430

TITLE: Dry compositions for preparing submicron emulsions

INVENTOR(S): Friedman, Doron; Aldouby, Yanir

PATENT ASSIGNEE(S): Pharmos Corp., USA SOURCE: PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PA7	CENT :	NO.		KI	ND	DATE			A	PPLI	CATI	ON N	0.	DATE				
	WO	9315	 736		 А:	1	1993	0819		W	0 19	93-U	s141	5	1993	0217			
		W:	ΑU,	BB,	BG,	BR,	CA,	CZ,	FI,	HU,	JΡ,	KR,	LK,	MG,	MN,	MW,	NO,	NΖ,	
			PL,	RO,	RU,	SD,	SK,	UA											
		RW:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙE,	ΙT,	LU,	MC,	ΝL,	PT,	SE,	
			BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	ML,	MR,	SN,	TD,	ΤG				
	IL	1010	07		A	1	1997	0814		I	L 19	92-1	0100	7	1992	0218			
	US	5472	706		Α		1995	1205		U	S 19	93-1	6913		1993	0212			
	ΑU	9337	215		A	1	1993	0903		Α	U 19	93-3	7215		1993	0217			
	ΑU	6759	30		B	2	1997	0227											
	ΕP	6268	50		A.	1	1994	1207		E	P 19	93-9	0602	4	1993	0217			
															LU,		ΝL,	PT,	SE
	JΡ	0850	6081		T	2	1996	0702		J	P 19	93-5	1434	0	1993	0217			
		9301																	
	US	5750	142		Α		1998	0512		Ū	S 19	97-8	4017	7	1997	0411			
PRIO	RITY	APP	LN.	INFO	. :					IL 1	992-	1010	07		1992	0218			
									1	US 1	993-	1691	3		1993	0212			
									1	WO 1	993-	US14	15		1993	0217			
									1	US 1	995-	4867	91		1995	0607			

AB Dry and stable compns. which can be reconstituted to form pharmaceutical or cosmetic emulsions having mean droplet size of 0.05-0.5.mu.m are disclosed. The lyophilized dry compn. comprise an amino compd. 40-90, an

emulsifier 0.1-20, and an oil 0.2-40%. A submicron emulsion was prepd. by mixing 4.25% medium-chain triglyceride oil, 0.75% lecithin, 0.02% .alpha.-tocopherol, 2% Pluronic F-68, 1.5% Na deoxycholate and water to 100%. The emulsion was homogenized and dild. with water to yield an oil concn. of 0.5% prior to lyophilization and glycine was added to achieve concn. of 6%, then lyophilized. The lyophilized emulsion was reconstituted with water to obtain an iso-osmolar emulsion with mean droplet-size of 0.28.mu.m.

L117 ANSWER 17 OF 33 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1992:82517 CAPLUS

DOCUMENT NUMBER: 116:82517

TITLE: Dietary modification to alleviate mycotoxin toxicity

in poultry

INVENTOR(S): Hulse, Sid D.; Maurice, D. V.; Ward, Nelson E.;

Wicker, David L.

PATENT ASSIGNEE(S): Degussa Corp., USA

SOURCE: U.S., 3 pp. CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

AB

PATENT NO. KIND DATE APPLICATION NO. DATE -----US 5063066 A 19911105 US 1990-472046 19900129 Feed supplementation with methionine and niacinamide alleviates the effects of mycotoxins such as aflatoxins in poultry. A 30-day feed study on 1-day old broiler chickens with a feed contg. mold-infested corn was conducted. Adverse effects, e.g. depressed growth and feed utilization efficiency, induced by aflatoxins at 300-500 ppm were reversed

niacinamide 0.1-0.3 wt.% to the diet. L117 ANSWER 18 OF 33 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1977:512714 CAPLUS

87:112714 DOCUMENT NUMBER: TITLE: Inhibitory action of nikethamide and chlordiazepoxide

and brought to normal levels by adding methionine 0.3 and

on lung carcinogenic activity of ethyl urethane in mice. Comments on iatrogenic carcinogenesis and anti-carcinogenesis

De Azevedo e Silva, Evans; De Morais Carvalho, AUTHOR(S):

Ivanilde Maciel; Maciel, Eldenize Amorim

CORPORATE SOURCE: Lab. Patol. Exp., Univ. Fed. Pernambuco, Recife,

Brazil

SOURCE: Rev. Bras. Med. (1977), 34(2), 63-8

CODEN: RBMEAU

DOCUMENT TYPE: Journal Portuguese LANGUAGE:

In a study of the anticarcinogenic activity of nikethamide (I) [59-26-7] and chlordiazepoxide (II) [58-25-3] in mice treated with Et urethane [51-79-6] 6 days after treatment with I or II, the av. no. of pulmonary adenomas were 1.33 and 1.63 in I and II, resp., compared to 6.60 in controls (Et urethane only). The incidence of adenomas was 60.00 and 81.91% in groups treated with I and II, resp., compared with 93% in controls. Sleeping time values (Fujimoto, J. M., and Plaa, G. L., 1961) were 175.23, 96.20, and 184.00 min for I, II, and control groups, resp.

L117 ANSWER 19 OF 33 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 2002035592 EMBASE

TITLE: Inducible protective processes in animal systems. X. Influence of nicotinamide in methyl methanesulfonate-

adapted mouse bone marrow cells.

AUTHOR: Guruprasad K.P.; Vasudev V.; Anilkumar M.N.; Chethan S.A.

CORPORATE SOURCE: V. Vasudev, Department of Applied Zoology, Kuvempu

University, BR Project-577 115, Shimoga District, Karnataka

State, India

SOURCE: Mutagenesis, (2002) 17/1 (1-8).

Refs: 60

ISSN: 0267-8357 CODEN: MUTAEX

COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 022 Human Genetics 052 Toxicology

LANGUAGE: English SUMMARY LANGUAGE: English

The adaptive response is an error-free DNA repair mechanism induced by low levels of physical or chemical agents. Cells pre-exposed to such agents are resistant to genetic damage induced by subsequent treatment at a high dose. There are many reports on such adaptive responses. Recently we have shown the existence of adaptive responses in vivo in the grasshopper Poecilocerus pictus and the mouse and in vitro in human lymphocytes. Different enzymes are implicated in this DNA repair pathway. In an attempt to understand the molecular mechanism of the methyl methanesulfonate (MMS)-induced adaptive response, the present investigations have been undertaken employing nicotinamide, an inhibitor of the DNA repair enzyme poly(ADP-ribose) polymerase (PARP). Pre-, inter- and post-treatments with nicotinamide of MMS-treated mouse bone marrow cells were carried out. The results revealed that there is a significant reduction in the frequency of chromosomal aberrations compared with combined treatment, suggesting an enhancement of the adaptive response by nicotinamide. Further, the results of NAD(+) assay in the inter-treatment experiment showed that there is no depletion of NAD(+). Thus, it can be stated that PARP is not involved in the MMS-induced adaptive response in mouse bone marrow cells.

L117 ANSWER 20 OF 33 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 2000244902 EMBASE

TITLE: Pancreatic beta cell death - Is nitric oxide the culprit?.

AUTHOR: Adeqhate E.; Parvez S.H.

CORPORATE SOURCE: Dr. E. Adeghate, Department of Human Anatomy, Faculty of

Medicine Health Sciences, United Arab Emirates University,

PO Box 17666, Al Ain, United Arab Emirates.

eadeghate@uaeu.ac.ae

SOURCE: Biogenic Amines, (2000) 15/6 (569-592).

Refs: 62

ISSN: 0168-8561 CODEN: BIAME7

COUNTRY: Netherlands

DOCUMENT TYPE: Journal; General Review FILE SEGMENT: 003 Endocrinology

029 Clinical Biochemistry 048 Gastroenterology

LANGUAGE: English SUMMARY LANGUAGE: English

The pancreatic beta cell is the most numerous cell type in the endocrine pancreas. It is particularly important because of its role in insulin secretion, a crucial hormone in glucose metabolism. In view of this, the significance of the survival of pancreatic beta cell cannot be over emphasised. Pancreatic beta cell death occurs in a variety of ways. The destruction of beta cell can be induced by 1: free radicals (H2O2, O2-, HO-) and nitric oxide; 2. Cytokines (tumour necrosis factor, interleukin-1 beta, interferon-gamma); 3: alkylating agents (streptozotocin, alloxan, N-methyl-nitrosourea N-ethyl-N-nitrosourea, Methylmethanesulphonate and ethylmethanesulphonate); 4: hyperglycaemia; 5. islet amyloid poplypeptide and 6. Inositol Monophosphate dehydrogenase inhibitors. There is enough evidence that alkylation agents and cytokines exert their toxic effects on

pancreatic beta cell through the nitric oxide pathway. The pancreatic beta cell death induced by these toxic agents can be prevented and or delayed by nicotinamide (vitamin B3), heat shock, copper, alpha-tocopherol (vitamin E), succinic acid, dihydroxylipoic acid, fusidic acid, glucocorticoids, cyclosporin A, growth factors and gene therapy.

L117 ANSWER 21 OF 33 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 2000102007 EMBASE

TITLE: Protection from cytotoxic effects induced by the nitrogen

mustard mechlorethamine on human bronchial epithelial cells

in vitro.

AUTHOR: Rappeneau S.; Baeza-Squiban A.; Jeulin C.; Marano F.

CORPORATE SOURCE: S. Rappeneau, Lab. Cytophysiol. Toxicol. Cell., Universite

Paris VII-Denis Diderot, 2 place Jussieu, 75251 Paris Cedex

05, France. rappeneau@paris7.jussieu.fr

SOURCE: Toxicological Sciences, (2000) 54/1 (212-221).

Refs: 32

ISSN: 1096-6080 CODEN: TOSCF2

COUNTRY: United States
DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 037 Drug Literature Index

052 Toxicology

LANGUAGE: English SUMMARY LANGUAGE: English

The present study was undertaken to find potent molecules against the toxicity of nitrogen mustard mechlorethamine (HN2) on respiratory epithelial cells, using a human bronchial epithelial cell line (16HBE14o-) as an in vitro model. The compounds examined included inhibitors of poly(ADP-ribose) polymerase (PARP), sulfhydryl-group donors as nucleophiles, and iron chelators and inhibitors of lipid peroxidation as antioxidants. Their effectiveness was determined upon observance of metabolic dysfunction induced by HN2 following a 4-h exposure, using (3-(4,5-dimethylthiazole-2-yl)-2,5- diphenyl tetrazolium bromide (MTT) reduction and ATP-level assays as indicators. Moreover, the fluorescent probe, monobromobimane (mBBr), and 2',7'-dichlorofluorescin-diacetate (H2DCF-DA) were used to assess intracellular sulfhydryl and peroxide level modifications by flow cytometry, respectively, following a 3-h exposure. At last, cell death was assessed by flow cytometry using the propidium iodide (PI)-dye-exclusion assay following 24-h exposure. PARP inhibitors (niacinamide, 3-aminobenzamide, 6(5H)- phenanthridinone), and two sulfhydryl-group donors (N-acetylcysteine, WR- 1065) were found to be effective in preventing HN2-induced metabolic dysfunction when added in immediate or delayed treatment with HN2. Only N- acetylcysteine, however, was found to prevent cell death induced by HN2, though it must be present at the time of the HN2 challenge. Flow cytometric measurements of intracellular sulfhydryl levels strongly suggested that N- acetylcysteine and WR-1065 are preventive in alkylation of cellular compounds, mainly by direct extracellular interaction with HN2. PARP inhibitors prevent secondary deleterious effects induced by HN2, considering metabolism dysfunction as the endpoint. Elsewhere, the oxidative stress appears to be a side effect in HN2 toxicity only upon considering the inefficiency of several antioxidants.

L117 ANSWER 22 OF 33 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 95146923 EMBASE

DOCUMENT NUMBER: 1995146923

AUTHOR:

TITLE: Evaluation of protective effects of sodium thiosulfate,

cysteine, niacinamide and indomethacin on sulfur mustard-treated isolated perfused porcine skin. Zhang Z.; Riviere J.E.; Monteiro-Riviere N.A.

CORPORATE SOURCE: Cutaneous Pharmacology Center, North Carolina State

University, 4700 Hillsborough Street, Raleigh, NC 27606,

United States

09/693558 Page 19 Jones

SOURCE:

Chemico-Biological Interactions, (1995) 96/3 (249-262).

ISSN: 0009-2797 CODEN: CBINA8

COUNTRY:

Ireland

DOCUMENT TYPE:

Journal; Article

FILE SEGMENT:

General Pathology and Pathological Anatomy 005

013 Dermatology and Venereology

052 Toxicology 030 Pharmacology

037 Drug Literature Index

English LANGUAGE: SUMMARY LANGUAGE: English

Sulfur mustard (bis(2-chloroethyl)sulfide, HD), a bifunctional alkylating agent, causes severe cutaneous injury, including cell death, edema and vesication. However, the mechanisms underlying HD-induced cutaneous toxicity remain undefined. The isolated perfused porcine skin flap (IPPSF) has been utilized to investigate dermal toxic compounds and pharmacological intervention. In this study, 4 compounds with different pharmacological mechanisms were tested for their ability to prevent the dark basal cell formation, vesication and vascular response characteristic of exposure to HD in the IPPSF. Reduction of HD-induced dark basal cells was observed in IPPSFs perfused with sodium thiosulfate and cysteine, which are HD scavengers; niacinamide, a possible NAD+ stabilizer and an inhibitor of poly (ADP-ribose) polymerase; or indomethacin, a cyclooxygenase inhibitor, respectively. Treatments with niacinamide and indomethacin, but not sodium thiosulfate or cysteine, resulted in an inhibition of the vascular response in IPPSF exposed to HD. Microvesicles caused by HD were only partially prevented in the indomethacin-perfused IPPSFs. These data suggest that none of these agents alone would be successful antivesicant agents and different mechanisms are involved in production of HD-induced dark basal cells, microvesicles and the vascular response; unfortunately, blocking of the cellular toxicity as evidenced by dark basal cell formation did not prevent vesication, suggesting that other mechanisms must be operative and that there is a multistep, biochemical process that leads to a final lesion.

L117 ANSWER 23 OF 33 WPIDS COPYRIGHT 2002

DERWENT INFORMATION LTD

ACCESSION NUMBER:

WPIDS 2001-602706 [68]

DOC. NO. CPI:

C2001-178539

TITLE:

Heme oxygenase-1 inducer or induction enhancer comprise

nicotinamide derivative.

DERWENT CLASS:

INVENTOR(S):

TANAKA, T

PATENT ASSIGNEE(S):

(TANA-I) TANAKA T

COUNTRY COUNT:

95

B03

PATENT INFORMATION:

PATENT NO KIND DATE WEEK PG

WO 2001068094 A1 20010920 (200168)\* JA 17

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ

NL OA PT SD SE SL SZ TR TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ

LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD

SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2001041177 A 20010924 (200208)

PATENT NO KI	IND		PLICATION	DATE
WO 2001068094 AU 2001041177		WO	2001 012122	20010316

#### FILING DETAILS:

PATENT NO KIND PATENT NO 

AU 2001041177 A Based on

WO 200168094

PRIORITY APPLN. INFO: JP 2000-76289 20000317

WO 200168094 A UPAB: 20011121

NOVELTY - Heme oxygenase-1 inducer or induction enhancer comprises a nicotinamide derivative.

ACTIVITY - Gastrointestinal; CNS; cardiant.

In the rat cerebral vascular kink model, 1,2-bis(nicotinamide )propane administered at 1 mg/kg/min for 2 hours by tail vein injection increased (p is less than 0.01) change in vessel diameter on day 2 compared to control.

MECHANISM OF ACTION - Heme oxygenase-1 stimulator USE - Useful for stimulating protection against cellular obstruction in the intestinal, circulatory or nervous system, especially for suppressing vascular kink. Dwg.0/3

L117 ANSWER 24 OF 33 WPIDS COPYRIGHT 2002 DERWENT INFORMATION LTD

ACCESSION NUMBER: 2001-235107 [24] WPIDS

DOC. NO. NON-CPI:

N2001-168085

DOC. NO. CPI:

C2001-070470

TITLE:

New isolated genetic suppressor element nucleic acid molecule encoding protein such as bone morphogenic protein-1, and double-strand break DNA repair gene protein, for treating human immunodeficiency virus

infection .

DERWENT CLASS:

B04 D16 S03

INVENTOR(S): PATENT ASSIGNEE(S): (SUBS-N) SUBSIDIARY NO 3 INC

DUNN, S J; HOLZMAYER, T A

COUNTRY COUNT:

94

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG \_\_\_\_\_\_

WO 2001016322 A2 20010308 (200124)\* EN 106

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE

SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2000073466 A 20010326 (200137)

#### APPLICATION DETAILS:

P	ATENT NO	KIND		PLICATION	DATE
	O 20010163: U 20000734	22 A2	WO	2000-US24262 2000-73466	

#### FILING DETAILS:

PATENT NO KIND PATENT NO \_\_\_\_\_ AU 2000073466 A Based on WO 200116322

PRIORITY APPLN. INFO: US 1999-388182 19990901

WO 200116322 A UPAB: 20010502

NOVELTY - An isolated genetic suppressor element (GSE) nucleic acid molecule (I) corresponding to a fragment of a gene or its complement that encodes a protein (II), where (I) is operably linked to a regulatory sequence, and expression of (I) in a host cell inhibits infection by human immunodeficiency virus (HIV), is new.

DETAILED DESCRIPTION - A new isolated genetic suppressor element (GSE) nucleic acid molecule (I) corresponds to a fragment of a gene or its complement that encodes a protein (II), selected from bone morphogenic protein-1, double-strand break DNA repair gene protein, rat guanine nucleotide releasing protein, anti-proliferative factor (BTG-1), lymphocyte-specific protein 1, protein phosphatase 2A, squalene synthetase, eukaryotic release factor 1, GTP binding protein, importin beta subunit, cell adhesion molecule L1, U-snRNP (ribonucleoprotein) associated cyclophilin, recepin, Arg/Ab1 interacting protein (ArgBP2A), keratin related protein, p18 protein, p40 protein, glucosidase II, alpha enolase, macrophage inflammatory protein 1 alpha , tumor protein translationally-controlled 1 (TCTP1), BBC1 (undefined), Nef interacting protein, Na+-D-glucose cotransport regulatory gene protein, heat shock protein (hsp) 90 chaperone protein, FK506-binding protein A1, Rox, beta signal sequence receptor, tumorous imaginal disc protein, cell surface heparin binding protein and their homologs.

INDEPENDENT CLAIMS are also included for the following:

- (1) an isolated protein (II) comprising a peptide or a less than full length fragment of (II), where (II) inhibits infection by HIV;
  - (2) an expression vector (III) comprising (I);
  - (3) a host cell (IV) comprising (I);
- (4) an HIV inhibitory composition (V) comprising a protective compound selected from (II), its mimetope, (I), and an inhibitor of a product of a target gene identified by its ability to inhibit HIV infection;
- (5) protecting host cells from HIV infection
  comprising introducing (V);
- (6) treating HIV infection comprising administering (V) to an individual; and
- (7) selecting (M) an inhibitor involving exposing a mammalian cell to a test compound, measuring the expression or a cellular gene or the activities of its encoded product in the cell, and selecting the compound which down-regulates expression of the gene or interferes with the activities of its encoded product, where the cellular gene encodes (II).

ACTIVITY - Anti-HIV. Suppression of HIV infection with NADH (reduced nicotinamide adenine dinucleotide dehydrogenase) was tested. NADH dehydrogenase inhibitors, amytal and mofarotene, were diluted in sterile culture medium and used. OM10.1 cells were cultured in RPMI 1640 glucose-free media prior to and during incubation with NADH dehydrogenase inhibitors and tumor necrosis factor (TNF) - alpha induction. The inhibitors were added to the cells followed by TNF- alpha induction. The expression of CD4 by the cells was assessed. Human peripheral blood leukocytes (PBLs) were isolated. Cells were washed and PBLs were activated with phytohemagglutinin and placed in a humidified incubator. After two days of activation, 106 cells were infected with HIV-1SF33, in the presence of mofarotene. A separate set of uninfected samples in the presence of mofarotene were also maintained as controls. The cells were gated for CD3 expression (for T cells) and the expression of CD4 and viral p24 and CD4 was examined. Since several gene suppressor elements (GSEs) had substantial sequence identity with cellular genes which encoded different subunits of NADH dehydrogenase, two compounds with known NADH dehydrogenase-inhibitory activities were tested for their ability to suppress HIV infection. The results showed that amytal inhibited the induction of latent HIV provirus in OM10.1 cells. In the same assay, mofarotene, which down-regulated mitochondrial gene expression, also inhibited HIV-1 induction.

MECHANISM OF ACTION - Gene therapy; human cellular gene product inhibitor; mRNA translation blocker. No biological data is given.

USE - A composition (V) comprising a protective compound selected from a polypeptide (II) encoded by (I), its mimetope, (I), and an inhibitor of a product of a target gene is useful for protecting host cells from HIV infection by introducing (V) into the host cells in vitro or in vivo and for treating HIV infection (claimed). (I) is useful to design polypeptides or peptides capable of inhibiting HIV infection. An expression vector (III) comprising (I) is useful in cloning, sequencing and/or manipulating (I). Dwg.0/9

L117 ANSWER 25 OF 33 WPIDS COPYRIGHT 2002 DERWENT INFORMATION LTD

ACCESSION NUMBER: 2001-490914 [54] WPIDS

DOC. NO. CPI: C2001-147490

Topical cosmetic composition, useful for protecting skin TITLE:

and hair against sunlight, contains an extract from the

red alga Polysiphonia lanosa.

DERWENT CLASS: D21 E19

INVENTOR(S): PRADINES, R D; SIROP, J C

(BREV-N) BREVETS LICENCES & COMMERCIALISATIONS LA PATENT ASSIGNEE(S):

COUNTRY COUNT:

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG \_\_\_\_\_ FR 2803200 A1 20010706 (200154)\* 10

APPLICATION DETAILS:

APPLICATION DATE PATENT NO KIND \_\_\_\_\_\_ FR 2803200 A1 FR 1999-16781 19991230

PRIORITY APPLN. INFO: FR 1999-16781 19991230

AB FR 2803200 A UPAB: 20010924

NOVELTY - Topical cosmetic composition comprises, in an aqueous or aqueous-alcoholic medium, an extract of the red marine macroalga Polysiphonia lanosa that contains mycosporin-like amino acids (I).

USE - The compositions are used to protect the skin and/or hair against light, particularly ultra-violet in sunlight.

ADVANTAGE - The algal extract provides compositions with good photochemical stability and a high index of protection, without significant skin intolerance. Dwq.0/0

L117 ANSWER 26 OF 33 WPIDS COPYRIGHT 2002 DERWENT INFORMATION LTD

ACCESSION NUMBER: 2000-272226 [24] WPIDS

CROSS REFERENCE: 2000-246648 [20] DOC. NO. CPI: C2000-083210

TITLE: Protecting cells, tissues and organs against age-induced

> degradation, using trimethylammonium compound or S-adenosyl-methionine to combat reduced adenosine

triphosphate production.

DERWENT CLASS: B02 B05 D13 D21 INVENTOR(S): BOROS, M; GHYCZY, M

PATENT ASSIGNEE(S): (GHYC-I) GHYCZY M

COUNTRY COUNT:

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG \_\_\_\_\_\_ DE 19839441 A1 20000302 (200024)\*

#### APPLICATION DETAILS:

APPLICATION DATE PATENT NO KIND DE 1998-19839441 19980829 DE 19839441 A1

PRIORITY APPLN. INFO: DE 1998-19839441 19980829

DE 19839441 A UPAB: 20000522

NOVELTY - Use of compounds (I) containing a trimethylammonio-methyl or 2-(trimethylammonio)-ethyl group or S-adenosyl-methionine (II) is claimed for the preparation of medicaments, or in dietetic or other foods, feedstuffs and/or skin care compositions, for the prophylaxis and/or treatment of age-associated reduced adenosine triphosphate (ATP) production.

ACTIVITY - Cytoprotective.

MECHANISM OF ACTION - Oxidant. In aerobic cells, (I) act as oxidizing agents which counteract the reductive effect of excessive NADH, NADPH and FADH2 (i.e. the reduced forms of nicotinamide-adenine dinucleotide, nicotinamide-adenine dinucleotide phosphate and flavine-adenine dinucleotide) in reducing ATP biosynthesis.

USE - (I) or (II) delays the effects of aging on cells, tissues and organs (e.g. the heart, brain and skeletal muscle), by normalizing production of ATP (a major cellular energy source) in mitochondria.

In tests in 4-year old rats, oral administration of 200 mg/kg of betaine once daily for a week increased the cardiolipin content of the phospholipids in the mitochondria from 12.1 wt. % to 16.3 wt. % (ca. 25 % increase). The corresponding values for the same tests in 1-year old rats were 16.4 wt. % and 16.3 wt. % (no significant difference).

ADVANTAGE - (I) are natural products which convert the excess reducing agents into harmless metabolites. They have a similar action to carnitine, but (unlike carnitine) do not act as fatty acid carriers. Dwa.0/0

L117 ANSWER 27 OF 33 WPIDS COPYRIGHT 2002 DERWENT INFORMATION LTD

ACCESSION NUMBER: 2000-657008 [64] WPIDS

DOC. NO. CPI:

C2000-198873

TITLE:

Application of coenzyme nicotinamide adenine dinucleotide and its composition in cell

protecting medicines.

DERWENT CLASS:

B04 D16

INVENTOR(S):

XU, M; ZHANG, J

PATENT ASSIGNEE(S): (UYZH-N) UNIV ZHUJIANG HOSPITAL MILITARY MEDIAL COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG \_\_\_\_\_\_ CN 1264599 A 20000830 (200064)\*

APPLICATION DETAILS:

APPLICATION DATE PATENT NO KIND CN 1264599 A CN 2000-114011 20000110

PRIORITY APPLN. INFO: CN 2000-114011 20000110

CN 1264599 A UPAB: 20001209

NOVELTY - An application of coenzyme nicotinamide adenine dinucleotide (NAD) and its composition in cell protecting medicines is disclosed. NAD has the functions of promoting growth of red cells to improve anemia caused by

#### chemotherapy, protecting normal tissue

cells from being damaged by chemicals and radiation, reinforcing the shield of gastric mucosa to promote ulcer healing, resisting oxidization and sanility and preventing liver fibrosis. The H22 cells treated by NAD has stronger immunogenicity to stimulate the generation of specific anti-tumor immunity. Dwg.0/0

L117 ANSWER 28 OF 33 WPIDS COPYRIGHT 2002 DERWENT INFORMATION LTD

ACCESSION NUMBER: 1999-602383 [52] WPIDS

DOC. NO. CPI: C1999-175446

TITLE: Reducing side effects or neutralizing action of

carcinostatic or immunosuppressive agents,
especially pyridine derivatives, using vitamin

PP compounds, e.g. nicotinamide.

DERWENT CLASS: B02 B03

INVENTOR(S): BIEDERMANN, E; HASMANN, M; LOESER, R; RATTEL, B; REITER,

F; SCHEIN, B; SCHEMAINDA, I; SEIBEL, K; VOGT, K;

WOSIKOWSKI, K

PATENT ASSIGNEE(S): (CHEH) KLINGE PHARMA GMBH & CO KG

COUNTRY COUNT: 87

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

DE 19818044 A1 19991028 (199952) \* 48

WO 9953920 A1 19991028 (199953) EN

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL

OA PT SD SE SL SZ UG ZW

W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR

TT UA UG US UZ VN YU ZA ZW AU 9939282 A 19991108 (200014)

EP 1079832 A1 20010307 (200114) EN

R: AT BE CH DE DK ES FI FR GB GR IE IT LI LU NL PT SE

#### APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
DE 19818044 WO 9953920 AU 9939282 EP 1079832	A1 A1 A A1	DE 1998-19818044 WO 1999-EP2686 AU 1999-39282 EP 1999-922119 WO 1999-EP2686	19980422 19990421 19990421 19990421

#### FILING DETAILS:

PATENT	ИО	KIND			PAT	CENT	NO	
AU 9939	9282	A	Based	on	WO	9953	3920	
EP 1079	9832	A1	Based	on	WO	9953	3920	

PRIORITY APPLN. INFO: DE 1998-19818044 19980422

AB DE 19818044 A UPAB: 19991210

NOVELTY - Vitamin PP compounds (I) are used for

reducing the side-effects and/or neutralizing the action of carcinostatic or immunosuppressive agents (II).

DETAILED DESCRIPTION - The use of compounds (I) having

vitamin PP activity is claimed as cytoprotective

agents for preventing, reducing or eliminating the mild or acute side-effects and/or neutralizing the action of carcinostatic or

immunosuppressive agents (II) (especially substituted
pyridylalkanoic, pyridylalkenoic or pyridylalkynoic acid amides), in
diagnostic, cytostatic or immunosuppressive chemotherapy
, antiproliferative or metastasis formation inhibiting or preventing
therapy or the control of immune reactions such as autoimmune disease.
(II) is optionally used in combination with radiotherapy.

An INDEPENDENT CLAIM is included for pharmaceutical compositions containing at least one of several specific classes of nicotinic acid or nicotinamide derivatives or analogs as (I) and at least one of a specific class of substituted pyridylalkanoic, pyridylalkenoic or pyridylalkynoic acid amides as (II), plus carriers and additives.

ACTIVITY - Cytoprotective; cytostatic; antiproliferative; antitumor; immunosuppressive.

MECHANISM OF ACTION - None given.

USE - (I) reduce the side-effects and/or neutralize the action of (II), which are used in the treatment of e.g. solid tumors, leukemia, lymphoma, organ transplant rejection, psoriasis or autoimmune disease.

ADVANTAGE - (I) markedly reduce or completely eliminate side-effects of (II) (such as reduced leukocyte count) and/or neutralize the action of (II). (I) themselves have no harmful side-effects. In tests in mice, administration of N-(4-(1-diphenylmethylpiperidin-4-yl)-butyl)-3-(pyridin-3-yl)-propionamide (IIa) alone at 2 x 120 mg p.o. per day for 4 days reduced the leukocyte count from 5100 per mu 1 (in vehicle only controls) to 500 per mu 1 and caused death in 3/6 mice, whereas administration of the same dose of (IIa) in combination with nicotinamide at 2 x 500 mg i.p. per day gave a leukocyte count of 5900 per mu 1 and caused no deaths.

Dwg.0/0

L117 ANSWER 29 OF 33 WPIDS COPYRIGHT 2002 DERWENT INFORMATION LTD

ACCESSION NUMBER: 1999-255309 [22] WPIDS

DOC. NO. CPI: C1999-074846

TITLE: Treating diabetes in mammalian patient comprising

transplanting into patient viable porcine islets capable

of producing porcine insulin.

DERWENT CLASS: B04 B05 D16
INVENTOR(S): ELLIOTT, R B

PATENT ASSIGNEE(S): (DIAT-N) DIATRANZ LTD

COUNTRY COUNT:

PATENT INFORMATION:

APPLICATION DETAILS:

PATENT NO KIND APPLICATION DATE

AU 9881864 A AU 1998-81864 19980825

PRIORITY APPLN. INFO: AU 1997-8780 19970826 AB AU 9881864 A UPAB: 20011211

NOVELTY - The method for treating a mammalian patient suffering from diabetes comprises transplanting into the patient, viable porcine islets (extracted especially from a piglet at or near full term gestation) capable of producing porcine insulin within its hosts.

DETAILED DESCRIPTION - The islets are treated during preparative procedures with **nicotinamide** and/or any compound exhibiting similar growth promoting and **cytoprotective** effects and the patient is administered **nicotinamide** and/or a compound exhibiting similar growth promoting and **cytoprotective** effects

after the transplantation.

An INDEPENDENT CLAIM is also included for a preparation capable of being injected into a mammalian patient to provide transplantation comprising an effective amount of porcine islets (as above).

ACTIVITY - Antidiabetic.

MECHANISM OF ACTION - **Nicotinamide** inhibits antigen presentation by beta cells during traumatic process of purification of islets from other pancreatic components and stimulates the production of more and more biologically active beta cells.

USE - The method and the preparation are useful for treating diabetes. A 15 year old female (diabetic for 7 years) required an injection of daily doses of insulin totaling 76-78 units/day. Despite this her blood glucose levels were poorly controlled. The xenotransplant was carried out using 200000 islets. There was an immediate reduction in insulin requirement which reached its maximum between the 16-21 st day, post operatively. During this period average blood glucose levels were better than post operatively. The reduction averaged 18% less than the pre-transplant dose during this period. The effect slowly waned over the next few weeks.

ADVANTAGE - The islets are easier to prepare, are still capable of some replication and cell numbers, DNA content and insulin production capacity are enhanced. The replication and maturation of fetal islets is improved by the treatment. **Nicotinamide** also prevents the cytotoxic effects from the induction of MHC proteins by cytokines. Dwg.0/2

L117 ANSWER 30 OF 33 WPIDS COPYRIGHT 2002 DERWENT INFORMATION LTD

ACCESSION NUMBER: 1998-362923 [31] WPIDS

DOC. NO. NON-CPI: N1998-283301 DOC. NO. CPI: C1998-111767

TITLE: Screening for drugs that mediate opening or closing of

non-selective cation channels - useful for treating diseases associated with reactive oxygen species or lack of response to these species, e.g. cancer, diabetes etc..

DERWENT CLASS: B04 D16 S03

INVENTOR(S): ASHFORD, M L J; HERSON, P S

PATENT ASSIGNEE(S): (UYAB-N) UNIV ABERDEEN

COUNTRY COUNT: 81

PATENT INFORMATION:

PATENT	NO	KIND	DATE	WEEK	LA	PG

WO 9827426 A1 19980625 (199831) \* EN 31

RW: AT BE CH DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW

W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW

AU 9854048 A 19980715 (199846) GB 2335039 A 19990908 (199938) EP 946869 Al 19991006 (199946) EN

R: AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

GB 2335039 B 20010214 (200110)

PATENT NO	KIND	APPLICATION	DATE
WO 9827426	A1	WO 1997-GB3399	19971209
AU 9854048	Α	AU 1998-54048	19971209
GB 2335039	Α	WO 1997-GB3399	19971209
		GB 1999-13957	19990615

EP 946869	A1	EP 1997-947809	19971209
		WO 1997-GB3399	19971209
GB 2335039	В	WO 1997-GB3399	19971209
		GB 1999-13957	19990615

#### FILING DETAILS:

PAT	TENT NO	KIND			PAT	TENT NO
						000000
ΑU	9854048	Α	Based	on	WO	9827426
GB	2335039	Α	Based	on	WO	9827426
ΕP	946869	A1	Based	on	WO	9827426
GB	2335039	В	Based	on	WO	9827426

PRIORITY APPLN. INFO: GB 1996-26177 19961217

9827426 A UPAB: 19980805

Drug screening method comprises:

(i) adding a cell-death monitoring system (A) to a cell, or culture, known to respond to oxidative stress and/or reactive oxygen species (ROS) by opening a NA(NAD) (nicotinamide adenine dinucleotide activated non-selective cation) channel, and

(ii) adding at least 1 channel protective structure (B) to protect against the effects of ROS and cell depolarisation, thus determining the channel-antagonising properties of (B).

Also claimed is a compound (C) for treating diseases mediated by ROS (or lack of response to ROS) comprising a molecular structure (I) that acts directly on pore-forming subunits, or indirectly on accessory proteins and/or second messenger systems, for selective opening/closing of the channels and prevention/promotion of cell depolarisation.

USE - If (I) closes the channel, it prevents calcium overload and protects against cell necrosis. If it opens the channel is provides destruction of targeted cells (specifically cancer cells). Typical of many diseases in which ROS are implicated are diabetes mellitus, reperfusion injury, Parkinson's, Alzheimer's and Huntington's diseases, tardive dyskinesia, rheumatoid arthritis and paraquat poisoning. Dwq.1A,1B/5

L117 ANSWER 31 OF 33 WPIDS COPYRIGHT 2002 DERWENT INFORMATION LTD

ACCESSION NUMBER: 1997-349216 [32] WPIDS

2001-059934 [03] CROSS REFERENCE: DOC. NO. NON-CPI: N1997-289547 DOC. NO. CPI: C1997-112646

Treating diabetes - by transplantation of viable porcine TITLE:

islets which produce insulin in hosts.

DERWENT CLASS: B04 P31 P32 ELLIOTT, R B INVENTOR(S):

(ELLI-I) ELLIOTT R B; (CHIL-N) CHILDHOOD DIABETES PATENT ASSIGNEE(S):

TRANSPLANT RES TRUST

COUNTRY COUNT:

PATENT INFORMATION:

PAT	TENT NO	KIND	DATE	WEEK	LA	PG
	250834 6090400		19970526 20000718	(199732)* (200037)	EN	

PATENT NO	KIND	APPLICATION	DATE
NZ 250834 US 6090400	A A CIP of Cont of	NZ 1994-250834 US 1994-223945 US 1995-385362	19940207 19940406 19950207

#### US 1996-665357 19960617

PRIORITY APPLN. INFO: NZ 1994-250834 19940207 AB NZ 250834 A UPAB: 20010202

Treating diabetes comprises transplantation of viable porcine islets capable of producing insulin within a host. Also claimed is an injectable preparation comprising a viable insulin producing amount of islets extracted from a newborn piglet (whether premature or not) into nicotinamide and/or a compound having analogous effects.

The islets are preferably extracted from a piglet at near full term gestation. The tissue is treated during preparative procedures with nicotinamide and/or any compound exhibiting similar growth promoting and cytoprotective effects and the patient is administered with nicotinamide and/or any compound exhibiting similar growth promoting and cytoprotective effects for at least a period after transplantation and a source of protein that substitutes for bovine protein including casein. The preparation may be stored cryogenically before thawing and transplantation. The preparation has at least 100000 islets that are in a nicotinamide containing environment and which multiply on transplantation.

USE - The preparation is used for treating diabetes.

ADVANTAGE - Transplanted piglet islets are capable of producing insulin for long periods. **Nicotinamide** and similar compounds prevent antigen presentation by beta cells and can enhance production of more biologically active beta cells.

Dwg.0/2

L117 ANSWER 32 OF 33 WPIDS COPYRIGHT 2002 DERWENT INFORMATION LTD

ACCESSION NUMBER: 1992-124950 [16] WPIDS

TITLE: Potassium channel activators - used to protect organs

from sochaemic damage and to prepare medicaments for

surgical use.

DERWENT CLASS: B02 B03
INVENTOR(S): GROVER, G J

PATENT ASSIGNEE(S): (GROV-I) GROVER G J; (SQUI) SQUIBB & SONS INC E R

COUNTRY COUNT: 16

PATENT INFORMATION:

PATENT NO	KIND I	DATE	WEEK	LA	PG
EP 480257	A :	19920415	(199216)*	EN	27
R: AT BE	CH DI	E DK ES E	R GB IT L	LU	NL SE
CA 2051261	Α :	19920327	(199223)		
JP 05070347	Α :	19930323	(199316)		17
EP 480257	A3 :	19920805	(199336)		
JP 05294847	Α :	19931109	(199349)		16
JP 2622442	B2 :	19970618	(199729)		12
US 5643921	Α :	19970701	(199732)		8

PATENT NO	KIND		APPLICATION	DATE
EP 480257 CA 2051261 JP 05070347	A A A Div	, ex	EP 1991-116486 CA 1991-2051263 JP 1991-247648	19910926 19910912 19910926
02 000,001,	11 011	<b>011</b>	JP 1992-67047	19910926
EP 480257	<b>A</b> 3		EP 1991-116486	19910926
JP 05294847	A		JP 1991-247648	19910926
JP 2622442	B2		JP 1991-247648	19910926
US 5643921	Α		US 1990-589224	19900926

09/693558 Jones Page 29

#### FILING DETAILS:

PATENT NO PATENT NO KIND \_\_\_\_\_ JP 2622442 B2 Previous Publ. JP 05294847

PRIORITY APPLN. INFO: US 1990-589224 19900926

480257 A UPAB: 19931006

Potassium channel activators (I) are used to prepare medicaments for protecting organs and surrounding cells in mammals subjected to organ surgery.

Suitable cpds. (I) include pinacidil (US4057636), cromakalim (EP274821), nicorandil, minoxidil.

Pref. cpds. (I) are of formula (Ia) (where R = 2-oxyopyrrolidino (cromakalim) or a gp. of formula R1-R3. X = O or S; Y = S, NH or O).

(I) may be added to cardioplegia solns. in concns. of 3-60 (esp. 7-30) micromolar, or may be administered to the bypass patient or the organ donor or recipient at doses of 1-50 mg/kg.

USE - (I) may be used to reduce damage or ischaemia induced by cardiopulmonary bypass surgery or organ (esp. heart) transplant surgery.

L117 ANSWER 33 OF 33 WPIDS COPYRIGHT 2002 DERWENT INFORMATION LTD

ACCESSION NUMBER: 1987-079617 [11] WPIDS

DOC. NO. CPI:

C1987-033219

TITLE:

Compsn. for treating symptoms of excessive alcohol intake - comprises analgesic and nicotinamide or nicotinamide

adenine di nucleotide.

DERWENT CLASS: B05

(BLAS-I) BLASS D H

PATENT ASSIGNEE(S): (BI

PATENT INFORMATION:

PATENT NO	KINI	DATE	WEEK	LA	PG
WO 8701285		19870312 DE FR GB		EN	31
W: AU BR					
AU 8662877	Α	19870324	(198723)		
EP 271489	Α	19880622	(198825)	EN	11
R: AT BE	СН	DE FR GB	IT LI LU N	L SE	
FI 8800714	Α	19880216	(198844)		
EP 271489	В	19900228	(199009)	EN	
R: AT BE	СН	DE FR GB	IT LI LU N	L SE	
DE 3669105	G	19900405	(199015)		
US 5053396	Α	19911001	(199142)#		

#### APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 8701285	<b></b> А	WO 1986-EP492	19860821
EP 271489	A	EP 1986-904826	19860821
US 5053396	A	US 1990-562425	19900801

PRIORITY APPLN. INFO: GB 1985-21275 19850827; WO 1985-EP492 19850821

WO 8701285 A UPAB: 19930922 AB

Therapeutic compsn. for treating the symptoms associated with excessive intake of an alcohol comprises (a) an analgesic(s); (b) at least 7% of nicotinamide and/or nictoin-amide adenine dinucleotide (NAD).

The compsn. pref. also contains a water-soluble vitamin(s), an

antacid, an electrolyte salt replacing component, trace metal ions, an antihistamine(s), fructose and an alkaloid having a stimulating effect.

USE/ADVANTAGE - The comosn. is useful for treating acute and/or chronic symptoms associated with excessive ingestion or inhalation of alcohols, esp. of EtOH in alcoholic beverages. The nicotinamide and/or NAD may aid the breakdown of alcohol and the prods. formed from it in the body, and it may also protect tissues against their toxic effects. Also NAD or its precursor has a generally restorative and invigorating effect on the body and accelerates alcohol breakdown, while protecting tissues against the toxic effects of the alcohol and its breakdown prods.

Ther is also a synergistic action between the components of the compsn., and this is increased when certain water-soluble vitamins are present. 0/0

=> fil reg; d stat que 188

FILE REGISTRE ENTERED AT 15:26:29 ON 08 FEB 2002

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STRUCTURE FILE UPDATES: 6 FEB 2002 HIGHEST RN 390354-99-1 DICTIONARY FILE UPDATES: 6 FEB 2002 HIGHEST RN 390354-99-1

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

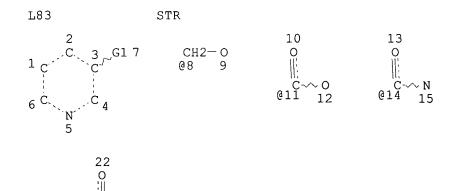
Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

The P indicator for Preparations was not generated for all of the CAS Registry Numbers that were added to the H/Z/CA/CAplus files between 12/27/01 and 1/23/02. Use of the P indicator in online and SDI searches during this period, either directly appended to a CAS Registry Number or by qualifying an L-number with /P, may have yielded incomplete results. As of 1/23/02, the situation has been resolved. Also, note that searches conducted using the PREP role indicator were not affected.

Customers running searches and/or SDIs in the H/Z/CA/CAplus files incorporating CAS Registry Numbers with the P indicator between 12/27/01 and 1/23/02, are encouraged to re-run these strategies. Contact the CAS Help Desk at 1-800-848-6533 in North America or 1-614-447-3698, worldwide, or send an e-mail to help@cas.org for further assistance or to receive a credit for any duplicate searches.



full file search done on this see structure

VAR G1=8/11/14/16

NODE ATTRIBUTES:
CONNECT IS E2 RC AT 16
CONNECT IS E2 RC AT 17
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

 $C \sim C \sim C \sim NH \sim CH2 - CH2$ 

**@16 17 18 19 20** 

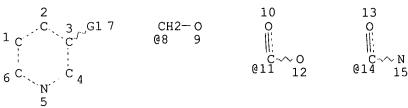
GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 22

STEREO ATTRIBUTES: NONE

L85 97689 SEA FILE=REGISTRY SSS FUL L83

L86 STR



subset searche done on this structure

VAR G1=8/11/14 NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE

±88 1 197173 SEA FILE=REGISTRY SUB=L85 SSS FUL L86 →

100.0% PROCESSED 97178 ITERATIONS

97173 ANSWERS - .

SEARCH TIME: 00.00.02

=> fil capl; d que nos 1101; d que nos 1102; s (1101 or 1102) not 1114 CFILE CAPLUS' ENTERED AT 15:26:57 ON 08 FEB 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 8 Feb 2002 VOL 136 ISS 7 FILE LAST UPDATED: 7 Feb 2002 (20020207/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

The P indicator for Preparations was not generated for all of the CAS Registry Numbers that were added to the CAS files between 12/27/01 and 1/23/02. As of 1/23/02, the situation has been resolved. Searches

and/or SDIs in the H/Z/CA/CAplus files incorporating CAS Registry Numbers with the P indicator executed between 12/27/01 and 1/23/02 may be incomplete. See the NEWS message on this topic for more information.

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L14
            5841 SEA FILE=CAPLUS ABB=ON
                                             (SIDE OR ADVERSE) (W) (AFFECT? OR
                  EFFECT?)/OBI
            8082 SEA FILE=CAPLUS ABB=ON CYTOPROTECT?/OBI
L23
            1080 SEA FILE=CAPLUS ABB=ON (ORGAN# OR TISSUE#)(2A)PROTECT?/OBI
L27
L83
                  STR
           97689 SEA FILE=REGISTRY SSS FUL L83
L85
                  STR
L86
           97173 SEA FILE=REGISTRY SUB=L85 SSS FUL L86
L88
           63902 SEA FILE=CAPLUS ABB=ON L88
L89
          5518 SEA FILE=CAPLUS ABB=ON L89(L) THU/RL - Role- Therapeut a use 17 SEA FILE=CAPLUS ABB=ON L99 (L) (L27 OR L23 OR L14)
L99
L101
            58/1 SEA FILE=CAPLUS ARR=ON (SIDE OR ADVERSE) (W) (AFFECT? OR
T 1 /
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L14	5841	EFFECT?)/OBI
L15	126993	SEA FILE=CAPLUS ABB=ON ANTITUMOR AGENTS/CT OR NEOPLASM#(L)INHI BITOR#/OBI
L16	9007	SEA FILE=CAPLUS ABB=ON CHEMOTHERAPY+NT,OLD/CT
L17	12145	SEA FILE=CAPLUS ABB=ON IMMUNOSUPPRESSANTS/CT
L18	10635	SEA FILE=CAPLUS ABB=ON IMMUNOSUPPRESSION/CT
L19	17507	SEA FILE=CAPLUS ABB=ON AUTOIMMUNE DISEASE+NT,OLD/CT
L23	8082	SEA FILE=CAPLUS ABB=ON CYTOPROTECT?/OBI
L27	1080	SEA FILE=CAPLUS ABB=ON (ORGAN# OR TISSUE#)(2A)PROTECT?/OBI
L83		STR
L85	97689	SEA FILE=REGISTRY SSS FUL L83
L86		STR
L88	97173	SEA FILE=REGISTRY SUB=L85 SSS FUL L86
L89	63902	SEA FILE=CAPLUS ABB=ON L88
L99	5518	SEA FILE=CAPLUS ABB=ON L89(L)THU/RL
L100		SEA FILE=CAPLUS ABB=ON L99 AND (L27 OR L23 OR L14)
~F105		SEA FILE=CAPLUS ABB=ON L100 AND (L15 OR L16 OR L17 OR L18 OR.
		<sup>C</sup> L19) `

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L118----- 23- (L101 OR L102) NOT (1114)
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=> d ibib abs hitstr 1118 1-23.

L118 ANSWER 1 OF 23 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2002:71866 CAPLUS

TITLE:

Novel methods/and compositions for the treatment or prevention of dysmenorrhea and menstrual side effects

with phosphølipase inhibitors

INVENTOR(S):

Shiels, Iam Alexander; Taylor, Stephen Maxwell;

Fairlie, David Paul

PATENT ASSIGNEE(S):

University of Queensland, Australia

PCT Int./Appl., 55 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent, English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	<b>-/</b>			
WO 2002005808	A1/	20020124	WO 2001-AU858	20010713

Searched by Barb O'Bryen STIC 308-4291

```
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR,
                     ∖CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, 
hat{H}
U, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
             RO, RU, SÞ, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
             UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE\lambda LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG,
                          ÇI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:
                                         AU 2000-8764
                                                           A 20000714
     Methods are disclosed \for the treatment or prevention of dysmenorrhea and
     menstrual side effects\ Method involves the use of secretory
     phospholipases A2 inhibitors in compns. and in methods for modulation of
     uterine contractions and for reducing or alleviating discomforting
     symptoms such as pain and blood loss, for the treatment and/or prophylaxis
     of dysmenorrhea and related conditions and for the treatment and/or
     prophylaxis of premature uterine expulsion of a fetus or embryo, impending
     abortion or miscarriage.
ΙT
     INDEXING IN PROGRESS
     38677-85-9, Flunixin 42461-847, Flunixin meglumine
ΙT
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)\
        (methods and compns. for treatment or prevention of dysmenorrhea and
        menstrual side effects with phospholipase
        inhibitors)
     38677-85-9 CAPLUS
RN
     3-Pyridinecarboxylic acid, 2-[{2-methyl-3-(trifluoromethyl)phenyl]amino]-
CN
           (CA INDEX NAME)
      HO<sub>2</sub>C
       NH
       Me
 CF<sub>3</sub>
RN
     42461-84-7 CAPLUS
     D-Glucitol, 1-deoxy-1-(methylamino)-, 2-[[2-methyl-3-
CN
     (trifluoromethyl)phenyl]amino]-3-pyridinecarboxylate (salt) (9CI)
     INDEX NAME)
     CM
          1
          38677-85-9
     CRN
     CMF C14 H11 F3 N2 O2
      HO<sub>2</sub>C
       NH
       Me
  CF<sub>3</sub>
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CRN 6284-40-8 CMF C7 H17 N O5 CDES \*

Absolute stereochemistry.

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OH
                     OH
MeNH
          OH
                 OH
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REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS 4 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L118 ANSWER 2 OF 23 CAPLUS COPYRIGHT 2002 ACS 2001:338492 CAPLUS/

ACCESSION NUMBER: DOCUMENT NUMBER:

134:353315

TITLE:

Preparation of indole derivatives as chymase

inhibitors and drugs containing the same as the active

ingredient

INVENTOR(S):

Nishimura, Koji/; Kuramoto, Yasuhiro; Tamura, Koichi;

Hirao, Yuzo; Amano, Hirotaka; Osaki, Mitsuhiko;

Yoshida, Jiro, Aoki, Shizuka; Sato, Kenji Wakunaga Pharmaceutical Co., Ltd., Japan

PATENT ASSIGNEE(S):

PCT Int. Appl., 167 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATE	ENT :	NO.		KI	ND	DATE			A	PPLI	CATI	ON NO	ο.	DATE			
WO 2	2001	<b>-</b> -	21	 A	- <b>-</b> 1	2001	0510		W	20	00-J	P759	0	2000	1027		
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CR,	CU,	CZ,	DE,	/DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,
		HU,	ID,	IL,	IN/	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,
		LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NO,	ΝZ,	PL,	PT,	RO,	RU,
		SD,	SE,	SG,	st,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,
						AZ,											
	RW:													AT,	BE,	CH,	CY,
														PT,			
						GA,											
RITY	APP			,										1999	1029		
									JP 2	000-	1297	60	Α	2000	0428		

PRIOR

MARPAT 134:353315

OTHER SOURCE(S):

Searched by Barb O'Bryen STIC 308-4291

AΒ Indole derivs. of general formula (I) or salts thereof [wherein R1 is an amino-protecting group or COR8 (wherein R8 is optionally substituted aryl or heteroaryl); R2 is H, optionally substituted alkyl or aryl; R3 is cyano, -COR9 (wherein R9 is H, optionally substituted alkyl, OH, alkoxy, aralkyloxy, carbamoyl, or cyclic aminocarbonyl), or S(O)n-R12 (wherein R12 is alkyl, aralkyl, or optionally substituted aryl or heteroaryl; and n is an integer of 0 to 2); and R4, R5, R6 and R7 are each independently H, alkyl, alkynyl, aralkyl, alkoxy, aralkyloxy, halogeno, trifluoromethanesulfonyloxy, aryl, or the like] are prepd. The compds. I or salts thereof exhibit an excellent chymase activity and are useful as preventive or therapeutic drugs for circulatory diseases, inflammation, immunol. diseases, allergic diseases, eye diseases, complications of diabetes, collagen disease, and obesity. They are also useful as protectants for mucous membrane and organs, preventives for cancer metastasis and infiltration, or improvers for survival rate after organ transplant. Thus, 3-[1-(4-dimethylaminobenzoyl)-3-phenylsulfonylindol-5yl]-2,4(1H,3H)-quinazolinedione and 2-[[1-(3-dimethylamino-2methylbenzoyl)-5-(2-sulfamoylphneyl)-2-methylindol-3-yl]sulfonyl]benzoic acid showed IC50 of 3 and 6, resp., against human chymase and that of 0.6 and 34,000, resp., against .alpha.-chymotrypsin.

IT 336189-30-1P 336189-41-4P 336189-42-5P 336189-47-0P 336189-48-1P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of indole derivs. as chymase inhibitors and drugs)

RN 336189-30-1 CAPLUS

CN 3-Pyridinecarboxylic acid, 6-[[5-[2-[[(1,1-dimethylethyl)amino]sulfonyl]ph enyl]-2-methyl-1H-indol-3-yl]thio]-, phenylmethyl ester (9CI) (CA INDEX NAME)

RN 336189-41-4 CAPLUS

CN 3-Pyridinecarboxylic acid, 2-[[5-[2-(aminosulfonyl)phenyl]-1-[3-(dimethylamino)-2-methylbenzoyl]-2-methyl-1H-indol-3-yl]sulfonyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

RN 336189-42-5 CAPLUS

CN 3-Pyridinecarboxylic acid, 6-[[5-[2-(aminosulfonyl)phenyl]-1-[3-(dimethylamino)-2-methylbenzoyl]-2-methyl-1H-indol-3-yl]sulfonyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me 2N} \\ \text{Me} \\ \text{C} = \text{O} \\ \text{N} \\ \text{Me} \\ \text{O} \\ \text{N} \\ \text{O} \\ \text{O$$

RN 336189-47-0 CAPLUS

CN 3-Pyridinecarboxylic acid, 2-[[5-[2-(aminosulfonyl)phenyl]-1-[3-(dimethylamino)-2-methylbenzoyl]-2-methyl-1H-indol-3-yl]sulfonyl]- (9CI) (CA INDEX NAME)

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RN 336189-48-1 CAPLUS
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CN

3-Pyridinecarboxylic acid, 6-[[5-[2-(aminosulfonyl)phenyl]-1-[3-(dimethylamino)-2-methylbenzoyl]-2-methyl-1H-indol-3-yl]sulfonyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L118 ANSWER 3 OF 23 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:208100 CAPLUS

DOCUMENT NUMBER: 134:231860

TITLE: Pharmaceutical compositions comprising an adenosine

receptor agonist or antagonist for cancer treatment

INVENTOR(S):
Fishman, Pnina

PATENT ASSIGNEE(S): Can-Fite Technologies Ltd., Israel

SOURCE: PCT Int. Appl., 68 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	PATENT NO. K				ND	DATE			A	PPLI	CATI	ON N	э.	DATE			
WO	2001	0193	60	 A:	2	2001	0322		W	D 20	00-I	 L550		2000	0908		
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CR,	CU,	CZ,	DE,	DK,	DΜ,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,
		HU,	ID,	IL,	IN,	IS,	J₽,	ΚE,	KG,	KP,	KR,	ΚŻ,	LC,	LK,	LR,	LS,	LT,
		LU,	LV,	MA,	MD,	MG,	ΜK,	MN,	MW,	MX,	MZ,	NO,	ΝŻ,	PL,	PT,	RO,	RU,
		SD,	SE,	SG,	SI,	SK,	sL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	ŪG,	US,	UZ,	VN,
		YU,	ZA,	ZW,	AM,	ΑZ,	ВY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM				
	RW:	GH,	GM,	ΚE,	LS,	MW,	ΜŻ,	SD,	SL,	SZ,	ΤZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,
		DE,	DK,	ES,	FI,	FR,	G₿,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GA,	GΝ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG			
PRIORITY	APP	LN.	INFO	.:			- 1		IL 1	999-	1318	64	Α	1999	0910		
	TOTAL TILLEN. INCO								IL 1	999-	1336	80	A	1999	1223		

OTHER SOURCE(S): MARPAT 134:231860

AB Adenosine receptor agonists and antagonists, particularly an agonist which binds to the A3 adenosine receptor, are used for induction of prodn. or secretion of G-CSF within the body, prevention or treatment of toxic side effects of a drug or prevention or treatment of leukopenia, particularly drug-induced leukopenias, and inhibition of abnormal cell growth and proliferation. For example, a marked inhibition of tumor growth was obsd. in nude mice with established HCT-116 human colon carcinoma treated with

IT

RN

CN

UA,

RW: GH

AU 9892981

PRIORITY APPLN. INFO.:

```
5-fluorouracil (5-FU, 30 mg/kg for 5 days), 2-chloro-N6-(2-iodobenzyl)-
     adenosine-5'-N-methyluronamide (Cl-IB-MECA, 6 mg/kg, every other day), and
     the combined therapy of Cl-IB-MECA and 5-FU. After 20 da/s a clear
     synergistic effect between Cl-IB-MECA and 5-FU in noting/the tumor mass
     was seen.
     212329-37-8, MRS 1523
     RL: BAC (Biological activity or effector, except adverse); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (oral compns. comprising adenosine receptor agonist or antagonist for
        prevention or treatment of toxic side effects and
        cancer treatment)
     212329-37-8 CAPLUS
     3-Pyridinecarboxylic acid, 6-ethyl-5-[(ethylthio)carbonyl]-2-phenyl-4-
     propyl-, propyl ester (9CI) (CA INDEX NAME)
n-Pro
   n-Pr
              SEt
            0
L118 ANSWER 4 OF 23
                     CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
                         2000:658496 CAPLUS
                         133:232874
DOCUMENT NUMBER:
                          Di-N-heterocyclic compounds, methods and compositions
TITLE:
                          for inhibiting PARP activity, and therapeutic use
                         Jackson / Paul F.; Maclin, Keith M.; Zhang, Jie
INVENTOR(S):
                         Guilford Pharmaceuticals, Inc., USA
PATENT ASSIGNEE(S):
                         U.S., A4 pp., Cont.-in-part of U.S. Ser. No. 79,510,
SOURCE:
                         abandøned.
                         CODEM: USXXAM
DOCUMENT TYPE:
                         Patent
                          Eng/lish
LANGUAGE:
FAMILY ACC. NUM. COUNT:
                         11
PATENT INFORMATION:
                      KIND
                                            APPLICATION NO.
     PATENT NO.
                            DATE
                                                            DATE
     US 6121278
                             20000919
                                            US 1998-145185
                                                             19980901
     ZA 9808010
                            19990303
                                            ZA 1998-8010
                                                             19980902
     ZA 9808011
                                                             19980902
                                            ZA 1998-8011
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     WO 9911644
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                                                             19980902
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             DK, E/E, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG,
                 KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
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                 NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,
             NO,
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Searched by Barb O'Bryen STIC 308-4291

UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

FT, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,

GA, GN, GW, ML, MR, NE, SN, TD, TG

19990322

Α1

GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,

AU 1998-92981

US 1997-922520

19980902

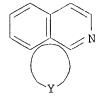
A2 19970903

US 1998-79510 B2 19980515 US 1998-79511 A 19980515 US 1998-145185 Α 19980901 WO 1998-US18188 W 19980902

OTHER SOURCE(S): GI

Ι

MARPAT 133:232874



AΒ The invention provides I (Y = atoms necessary to form fused 5- to6-membered, arom. or non-arom., heterocyclic ring contg. .gtoreq.1 N in 1,3-relationship with N shown; Y may be unsubstituted or substituted with .gtoreq.1 alkyl, alkenyl, cycloalkyl, cycloalkenyl, aralkyl, aryl, etc.), or pharmaceutically acceptable salts, hydrates, esters, solvates, prodrugs, metabolites, stereoisomers, or mixts. thereof, for inhibiting poly(ADP-ribose)polymerase (PARP) activity and treating a variety of diseases.

34014-51-2 37497-84-0 IΤ

RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (di-N-heterocyclic compds., methods and compns. for inhibiting PARP activity, and therapeutic use)

34014-51-2 CAPLUS RN

4-Isoquinolinecarboxylic acid, 1,2-dihydro-1-oxo- (6CI, 7CI, 8CI, 9CI) CN (CA INDEX NAME)

RN 37497-84-0 CAPLUS

CN 4-Isoquinolinecarboxylic acid, 1,2-dihydro-1-oxo-, methyl ester (7CI, 9CI) (CA INDEX NAME)

Jones Page 41

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OMe
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REFERENCE COUNT:

52 THERE ARE 52 CITED REFERENCES /AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L118 ANSWER 5 OF 23 CAPLUS COPYRIGHT 2002 ACS 2000:606857 CAPLUS ACCESSION NUMBER:

133:213059 DOCUMENT NUMBER:

Lectin compositions for reduction of damage due to TITLE:

chemotherapy or radiotherapy

INVENTOR(S): Pusztai, Arpad Janos; Bardócz, Zsuzsanna Magdolna;

Palmer, Richard Michael John; Fish, Neil William;

US 1997-994288

A2 19971219

Koteles, Gyorgy J.

PATENT ASSIGNEE(S): Alizyme Therapeutics Ltd., UK

U.S., 34 pp., Cont.-in/part of U.S. Ser. No. 994,288. SOURCE:

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE -----------US 6110891 20000829 US 1998-141821 19980828 PRIORITY APPLN. INFO.: GB 1996-13070 A 19960621 US 1997-879761 B2 19970620 GB 1997-18413 A 19970829

AB This invention provides methods for: the control of mucosal cell proliferation; the redn. and/or treatment of damage caused by a cell-damaging agent; and f or the redn. and/or treatment of a metabolic disorder. The methods comprise administering to an individual in need of control or redn. and/or/treatment on effective amt. of a lectin. The invention takes advanta/geous of the protective and repair capabilities of lectins. It is particularly useful in the prevention and treatment of animals undergoing radiotherapy and/or chemotherapy for cancer.

ΙT 68302-57-8, Amlexanox

RL: BAC (Biological áctivity or effector, except adverse); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); / PROC (Process); USES (Uses)

(lectin compns./for redn. of damage due to chemotherapy or radiotherapy) /

RN 68302-57-8 CAPLUS

CN 5H-[1]Benzopyrano[2,3-b]pyridine-3-carboxylic acid, 2-amino-7-(1methylethyl)-5-oxo- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

6

.... ......

L118 ANSWER 6 OF 23 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2000:62599 CAPLUS

DOCUMENT NUMBER: 132:88178

TITLE: Vitamin B6 analogs as antiarrhythmics and

cytoprotectives for treatment of heart

ischemia-reperfusion injury, myocardial infarction,

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS

and heart failure

INVENTOR(S): Dhara, Naranjan; Setti, Raja; Dakshinamuruty,

Krishinamuruty

PATENT ASSIGNEE(S): University of Manitoba, USA SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PRIO

PATENT NO.	KIND	DATE		APPLICATION NO.	DATE
			- 1		
JP 2000026295	A2	20000125	- 1	JP 1998-338077	19981127
AU 9894210	A1	20000203	- 1	AU 1998-94210	19981127
RITY APPLN. INFO.	:		US	1998-112277 A	19980709

AB Vitamin B6 analogs (including pyridoxal-5'-phosphate, pyridoxine, pyridoxal, and pyridoxamine), given orally or by other routes at 1-50 mg/kg, are claimed as antiarrhythmics and cytoprotectives for treatment of heart ischemia-reperfusion injury, myocardial infarction, and heart failure.

IT 54-47-7, Pyridoxal-5'-phosphate 65-23-6, Pyridoxine

66-72-8, Pyridoxal 85-87-0, Pyridoxamine

RL: BAC (Biological activity or effector, except adverse); THU

(Therapeutic use); BIOL (Biological study); USES (Uses)

(vitamin B6 analogs as antiarrhythmics and cytoprotectives for treatment of heart ischemia-reperfusion injury, myocardial

infarction, and heart failure

RN 54-47-7 CAPLUS

CN 4-Pyridinecarboxaldehyde, 3-hydroxy-2-methyl-5-[(phosphonooxy)methyl]-

(9CI) (CA INDEX NAME)

RN 65-23-6 CAPLUS

CN 3,4-Pyridinedimethanol, 5-hydroxy-6-methyl- (9CI) (CA INDEX NAME)

Searched by Barb O'Bryen STIC 308-4291

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Мe
HO-CH2
         CH2-OH
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RN 66-72-8 CAPLUS

4-Pyridinecarboxaldehyde, 3-hydroxy-5-(hydroxymethyl)-2-methyl- (9CI) (CA CN

INDEX NAME)

$$\begin{array}{c|c} \text{Me} & \text{N} \\ \text{HO} & \text{CH}_2\text{--OH} \end{array}$$

RN 85-87-0 CAPLUS

3-Pyridinemethanol, 4-(aminomethy1)-5-hydroxy-6-methy1- (9CI) (CA INDEX CN NAME)

COPYRIGHT 2002 ACS L118 ANSWER 7 OF 23 CAPLUS

2000**/**:6829 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

 $CH_2 - NH_2$ 

TITLE:

Complex protection and repair (therapy) of urethane-

and radiation-induced chromosomal lesions and

cafcinogenesis

AUTHOR(S):

K∤askovskii, G. V.; Mironova, G. I.; Gorobets, L. V.;

Døsetskaya, S. D.; Fedorova, M. V.

CORPORATE SOURCE:

Mnst. Fiziol., NAN Belarusi, Belarus

SOURCE:

∮okl. Nats. Akad. Nauk Belarusi (1999), 43(3), 85-88

CODEN: DNABFW; ISSN: 1561-8323

PUBLISHER: Belaruskaya Navuka

DOCUMENT TYPE:

Journal Russian

LANGUAGE:

Nicotinamide (1% 0/6 mL) radioprotective, cytoprotective, and

carcinogenesis inh $\!\!\!/$ ibiting properties were tested in mice administered

urethane (1.5 mg/ $\oint$ ) and thymaline or irradiated by roentgen rays.

98-92-0, Nicotina mide IT

RL: BAC (Biologidal activity or effector, except adverse); THU

(Therapeutic use); BIOL (Biological study); USES (Uses)

(nicotinamide radioprotectant and cytoprotectant properties)

RN 98-92-0 CAPLUS

3-Pyridinecarboxamide (9CI) (CA INDEX NAME) CN

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L118 ANSWER 8 OF 23
                      CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
                          1999:819240 CAPLUS
DOCUMENT NUMBER:
                          132:59193
TITLE:
                          Use of nitric oxide scavengers to treat side effects
                           caused by therapeutic administration of sources of
                          nitric oxide
INVENTOR(S):
                          La¼, Ching-San
PATENT ASSIGNEE(S):
                          Medinox, Inc., USA
SOURCE:
                           PCT \Int. Appl., 42 pp.
                           CODEN: PIXXD2
DOCUMENT TYPE:
                           Patent
LANGUAGE:
                           English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                       KIND DATE
                                             APPLICATION NO.
                                                               DATE
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     WO 9966924
                      A1 19991229 \
                                            WO 1999-US14049 19990621
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             JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
             TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
             MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
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     US 6265420
                      В1
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                                            US 1998-103640
                                                              19980623
     AU 9945817
                        A1
                              20000110
                                             AU 1999-45817
                                                              19990621
     EP 1089728
                            20010411
                                             EP 1999 928838 19990621
                       A1
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, FI
     US 2001056108
                              20011227
                                             US 2001-912757
                        Α1
                                                                20010724
                                           US 1998-103640\ A1 19980623
PRIORITY APPLN. INFO.:
                                           WO 1999-US14049 \W 19990621
                          MARPAT 132:59193
OTHER SOURCE(S):
     Nitric oxide scavengers, e.g. dithiocarbamate-contg. compds., are used to
     reduce side effects caused by the rapeutic administration of nitric oxide
     sources by administering the nitric oxide scavenger(s) t \delta the subject
     after the therapeutic effect of the nitric oxide source has been achieved.
     For example, the nitric oxide source can be coadministered with the nitric
     oxide scavenger, with the latter formulated in a time-releas \delta vehicle
     selected to delay release of the scavenger for a period of time sufficient
     to ensure that the therapeutic goal of the nitric oxide source has been
     achieved before release of the scavenger. Formulations and kits,
     including a bubble pack with pairwise arrangement of unit doses of a
     desired nitric oxide source and nitric oxide scavenger, are also provided.
     The side effects of sildenafil citrate (Viagra), or of simultaneous
```

formulations and kits of the invention.

TT 737-86-0, Pyridoxal isonicotinoyl hydrazone 38521-46-9, 2-Mercaptonicotinic acid

administration of such a nitric oxide source in combination with another,

e.g. nitroglycerin, are effectively controlled by the methods,

RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (nitric oxide scavengers to treat side effects caused by therapeutic administration of sources of nitric oxide) 737-86-0 CAPLUS 4-Pyridinecarboxylic acid, [[3-hydroxy-5-(hydroxymethyl)-2-methyl-4pyridinyl]methylene]hydrazide (9CI) (CA INDEX NAME)

38521-46-9 CAPLUS RN

3-Pyridinecarboxylic acid, 1,2-dihydro-2-thioxo- (9CI) (CA INDEX NAME) CN

RN

CN

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

CAPLUS COPYRIGHT 2002 L118 ANSWER 9 OF 23 ACCESSION NUMBER: 1999:659188 CAPLUS

2

DOCUMENT NUMBER:

131:281583

TITLE:

INVENTOR(S):

Compositions containing a combination of a creatine

compound and a neuroprotective compound for the

treatment of nervous system diseases Kaddurah-Daouk, Rima; Beal, M. Flint

Avicena Group, Inc., USA; The General Hospital PATENT ASSIGNEE(S):

Corporation

SOURCE: PCT Int, Appl., 81 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Paten# Engl/sh LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	CENT	NO.		KI	ŊÓ	DATE			A	PPLI	CATI	ON NO	0.	DATE			
WO	9951	097		- <u>-</u> /	 1	1999	1014		W	0 19:	99-U	S734	0	1999	0402		
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				,										ID,			
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		MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,
		TM,	TR/	TT,	UA,	UG,	UZ,	VN,	YU,	ZA,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,
		RU,	Τ <b>/</b> ,	MT													
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		CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG					
ΑU	9933	803/		A	1	1999	1025		A	U 19	99-3	3803		1999	0402		
EΡ	1065	931/		Α	1	2001	0110		E	P 19	99-9	1524	5	1999	0402		
	R:	ΑŢ,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ĮΈ,	FI														
		/															
		/			Sea	arche	d by	Rar	h O'	Brve	n ST	TC.	308	-4291			
		1			200		- ~ ~ <i>y</i>		~ 0	1	01		550		•		

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PRIORITY APPLN. INFO.:
                                        US 1998-80459
                                                         Ρ
                                                            19980402
                                        US 1999-283267
                                                         Α
                                                            19990401
                                        WO 1999-US7340
                                                         W
                                                            19990402
OTHER SOURCE(S):
                         MARPAT 131:281583
     The invention relates to the use of creatine compd. and neuroprotective
     combinations including creatine, creatine phosphate, or analogs of
     creatine, such as cyclocreatine, for treating diseases of the nervous
     system. Creatine compds. in combination with neuroprotective agents can
     be used as therapeutically effective compns. against a variety of diseases
     of the nervous system, e.g. diabetic and toxic neuropathies, peripheral
     nervous system diseases, Alzheimer disease, Parkinson's disease, stroke,
     Hungtington's disease, amyotrophic lateral sclerosis, motor neuron
     disease, traumatic nerve injury, multiple sclerosis, dysmyelination and
     demyelination disorders, and mitochondrial diseases. The creatine compds.
     which can be used in the present method include (1) creatine, creatine
     phosphate and analogs of these compds. which can act as substrates or
     substrate analogs for creatine kinase; (2) bisubstrate inhibitors of
     creatine kinase comprising covalently linked structural analogs of ATP and
     creatine; (3) creatine analogs which can act as reversible or irreversible
     inhibitors of creatine kinase; and (4) N-phosphorocreatine analogs bearing
     nontransferable moieties which mimic the N-phosphoryl group.
IT
     98-92-0, Nicotinamide
     RL: BAC (Biological activity or effector, except adverse); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (creatine compd.-neuroprotective compd. combination for treatment of
        nervous system disease)
RN
     98-92-0 CAPLUS
CN
     3-Pyridinecarboxamide (9CI)
                                  (CA INDEX NAME)
         NH2
REFERENCE COUNT:
                         7
                               THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
                     CAPLUS COPYRIGHT 2002 ACS
L118 ANSWER 10 OF 23
ACCESSION NUMBER:
                         1999:464048 CAPLUS
                         131:82989
DOCUMENT NUMBER:
TITLE:
                         Nitric oxide-releasing chelating agents and their
                         ther peutic use
INVENTOR(S):
                         Towart, Robertson; Karlsson, Jan Olof Gustav;
                         Wistrand, Lars Goran; Malmgren, Hakan
PATENT ASSIGNEE(S):
                         Nydomed Imaging A/S, Norway
                         PC/T Int. Appl., 48 pp.
SOURCE:
                         CØDEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         Ænglish
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO.
                                                            DATE
                      ____
                           _____
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     WO 9933823
                            19990708
                                           WO 1998-GB3840
                                                            19981218
                       A1
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             KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,
             MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
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TR, TT, UA
        RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
    AU 9917702
                      A1
                            19990719
                                           AU 1999-17702
                                                            19981218
                            20001220
                                           EP 1998-962567
                                                            19981218
     EP 1060174
                       Α1
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
                                           JP 2000-526505
                                                            19981218
     JP 2001527072
                       T2
                            20011225
                                        GB 1997-27226 A
                                                            19971223
PRIORITY APPLN. INFO.:
                                                         Ρ
                                                            19980304
                                        US 1998-76793
                                                         A 19980313
                                        GB 1998-5450
                                        WO 1998-GB3840
                                                         W 19981218
```

MARPAT 131:82989 OTHER SOURCE(S):

Chelating agents, in particular dipyridoxyl and aminopolycarboxylic acid-based chelating agents, and their metal chelates, when linked directly or indirectly to at least one nitric oxide-releasing moiety, or when use in combination with nitric oxide or a nitric oxide-releasing moiety, have been found to be effective in treating a variety of disorders. In particular, such compds. may be used in treating conditions assocd. with the presence of free radicals in the body, e.g. reperfusion injuries, and in reducing the cardiotoxicity of anti-tumor agents, e.g. anthracyclines and/or paclitaxel.

88969-06-6D, PLED, conjugates with nitric oxide-releasing moieties IT 118248-91-2D, DPDP, conjugates with nitric oxide-releasing moieties 230302-21-3D, conjugates with nitric oxide-releasing moieties 230302-22-4D, conjugates with nitric oxide-releasing moieties 230309-88-3D, DPMP, conjugates with nitric oxide-releasing moieties

RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(nitric oxide-releasing chelating agents, and therapeutic use)

RN 88969-06-6 CAPLUS

Glycine, N,N'-1,2-ethanediylbis[N-[[3-hydroxy-5-(hydroxymethyl)-2-methyl-4-CN pyridinyl]methyl] - (9CI) (CA INDEX NAME)

118248-91-2 CAPLUS RN

Glycine, N, N'-1, 2-ethanediylbis[N-[[3-hydroxy-2-methyl-5-CN [(phosphonooxy)methyl]-4-pyridinyl]methyl]- (9CI) (CA INDEX NAME)

RN 230302-21-3 CAPLUS

Pyridinium, 1-(carboxymethyl)-4-[[(carboxymethyl)[2-[(carboxymethyl)[[3-CN hydroxy-2-methyl-5-[(phosphonooxy)methyl]-4-pyridinyl]methyl]amino]ethyl]a mino]methyl]-3-hydroxy-2-methyl-5-[(phosphonooxy)methyl]- (9CI) (CA INDEX NAME)

RN 230302-22-4 CAPLUS

CN Pyridinium, 4,4'-[1,2-ethanediylbis[[(carboxymethyl)imino]methylene]]bis[1-(carboxymethyl)-3-hydroxy-2-methyl-5-[(phosphonooxy)methyl]-(9CI) (CA INDEX NAME)

RN 230309-88-3 CAPLUS

CN Glycine, N-[2-[(carboxymethyl)[[3-hydroxy-5-(hydroxymethyl)-2-methyl-4-pyridinyl]methyl]amino]ethyl]-N-[[3-hydroxy-2-methyl-5-[(phosphonooxy)methyl]-4-pyridinyl]methyl]- (9CI) (CA INDEX NAME)

RN 118248-91-2 CAPLUS

CN Glycine, N, N'-1, 2-ethanediylbis[N-[[3-hydroxy-2-methyl-5-[(phosphonooxy)methyl]-4-pyridinyl]methyl]- (9CI) (CA INDEX NAME)

Me 
$$CH_2-CO_2H$$
  $CH_2-CO_2H$   $OH$   $Me$   $CH_2-N-CH_2-N-CH_2$   $N$   $CH_2-OPO_3H_2$   $H_2O_3PO-CH_2$ 

RN 201539-62-0 CAPLUS

CN Glycine, N, N'-1, 2-ethanediylbis[N-[[3-hydroxy-2-methyl-5-

[(phosphonooxy)methyl]-4-pyridinyl]methyl]-, sodium salt (9CI) (CA INDEX NAME)

## x Na

230302-23-5 CAPLUS RN

Glycine, N, N'-1, 2-ethanediylbis[N-[[3-hydroxy-2-methyl-5-CN [(phosphonooxy)methyl]-4-pyridinyl]methyl]-, calcium salt (9CI) (CA INDEX NAME)

## Ca x

9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT:

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L118 ANSWER 11 OF 23 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1999:412670 CAPLUS

DOCUMENT NUMBER:

131:54044

TITLE:

Compositions comprising nicotinylalanine and an

inhibitor of glycine conjugation or vitamin B6, and

therapeutic use

INVENTOR(S):

Shaskan, Edward G.

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S., 27 pp., Cont.-in-part of U.S. Ser. No. 581,394,

abandoned.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5916906	A	19990629	US 1997-930234	19970912
WO 9628167	A1	19960919	WO 1996-US3435	19960313

W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT,

Page 50

LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI

RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA

PRIORITY APPLN. INFO.: US 1995-403676 19950314

US 1995-581394 19951229 WO 1996-US3435 19960313

OTHER SOURCE(S): MARPAT 131:54044

Compns. are provided which comprise nicotinylalanine (NAL) and/or related analogs, and an inhibitor of glycine conjugation, either synthetic or naturally occurring. Vitamin B6 may also be present in the compns.in place of, or in addn. to, the inhibitor of glycine conjugation. The compns. may be pharmaceutical in nature. The compns. are useful for inhibiting cellular poly(ADP-ribose) polymerase (PARP, PARS, poly(ADP-ribose) synthetase), an enzyme which causes cellular toxicity and which is activated in a variety of toxic and pathol. conditions. PARP is inhibited by some metabolites of the tryptophan oxidative pathway, including nicotinamide, kynurenic acid and xanthurenic acid, which are induced by interferon-gamma. The NAL-contg. compns. of the invention enhance the intracellular levels of these metabolites, and thereby augment the natural defense of interferon-induced inhibition of PARP. PARP is implicated in various pathol. conditions, including neurodegenerative disorders, viral infections such as AIDS, autoimmune diseases and cancer. Accordingly, the invention also relates to methods of reducing cellular toxicity, and treating or preventing such diseases, by increasing cellular concns. of nicotinamide, kynurenic acid and xanthurenic acid using the compns. of this invention.

IT 36724-75-1

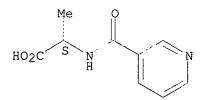
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(compns. comprising nicotinylalanine and an inhibitor of glycine conjugation or vitamin B6, and therapeutic use)

RN 36724-75-1 CAPLUS

CN L-Alanine, N-(3-pyridinylcarbonyl) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L118 ANSWER 12 OF 23 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1998:621086 CAPLUS

DOCUMENT NUMBER: 129:239911

TITLE: Nitrogen-containing oxyalkylene esters and therapeutic

uses thereof

INVENTOR(S): Nudelman, Abraham; Rephaeli, Ada PATENT ASSIGNEE(S): Beacon Laboratories, L.L.C., USA

SOURCE: PCT Int. Appl., 96 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

DATE PATENT NO. KIND APPLICATION NO. A1 19980917 WO 1998-US4763 19980311 WO 9839966 W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG US 1997-814225 19970311 US 6110970 A 20000829 AU 9865500 A1 19980929 AU 1998-65500 19980311 20000126 EP 1998-911573 19980311 EP 973389 Α1 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO US 1997-814225 A 19970311 PRIORITY APPLN. INFO.: WO 1998-US4763 W 19980311

OTHER SOURCE(S): MARPAT 129:239911

Compns. and methods are provided for treating, preventing or ameliorating cancer and other proliferative diseases, as are methods of inducing wound healing, treating cutaneous ulcers, treating gastrointestinal disorders, treating blood disorders such as anemias, immunomodulation, enhancing recombinant gene expression, treating insulin-dependent patients, treating cystic fibrosis patients, inhibiting telomerase activity, treating virus-assocd. tumors, esp. EBV-assocd. tumors, modulating gene expression and particularly augmenting expression of tumor suppressor genes, inducing tolerance to antigens, treating, preventing or ameliorating protozoan infection or inhibiting histone deacetylase in cells. The compns. of the invention are to and the methods of the invention use nitrogen-contg. oxyalkyl esters.

IT 213250-23-8 213250-24-9 213250-25-0

RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (nitrogen-contg. oxyalkylene esters and therapeutic use)

RN 213250-23-8 CAPLUS

CN 3-Pyridinecarboxylic acid, (1-oxobutoxy)methyl ester (9CI) (CA INDEX NAME)

RN 213250-24-9 CAPLUS

CN 3-Pyridinecarboxylic acid, 1-(1-oxobutoxy)ethyl ester (9CI) (CA INDEX NAME)

Page 52

RN 213250-25-0 CAPLUS

CN Pyridinium, 1-methyl-3-[[(1-oxobutoxy)methoxy]carbonyl]-, chloride (9CI) (CA INDEX NAME)

● cl-

L118 ANSWER 13 OF 23 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1998:124021 CAPLUS

DOCUMENT NUMBER: 128:158947

TITLE: Zinc-containing composition INVENTOR(S): Hasegawa, Kazuo; Ishii, Takako

PATENT ASSIGNEE(S): Taisho Pharmaceutical Co., Ltd., Japan; Hasegawa,

Kazuo; Ishii, Takako SOURCE: PCT Int. Appl., 14 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 9806410 A1 19980219 WO 1997-JP2770 19970807

W: AU, CA, CN, KR, US

RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
AU 9737842 A1 19980306 AU 1997-37842 19970807
JP 10109940 A2 19980428 JP 1997-213773 19970808
PRIORITY APPLN. INFO.: JP 1996-212604 19960812

AB The invention relates to a zinc-contg. compn. comprising vitamin B6 and a zinciferous component, characterized in that the molar ratio of vitamin B6 to zinc contained in the component lies between 0.55:1 and 2.2:1. This compn. is reduced in the side effects due to excessive intake of zinc and is therefore excellent in safety.

WO 1997-JP2770

19970807

IT 58-56-0, Pyridoxine hydrochloride

RL: BAC (Biological activity or effector, except adverse); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(zinc-contg. compns. comprising vitamin B6 to reduce **side effects** due to excessive intake of zinc)

RN 58-56-0 CAPLUS

CN 3,4-Pyridinedimethanol, 5-hydroxy-6-methyl-, hydrochloride (9CI) (CA INDEX NAME)

Page 53

## ● HCl

L118 ANSWER 14 OF 23 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1998:55546 CAPLUS

DOCUMENT NUMBER: 128:119675

TITLE: Useful formulations of acid addition salt drugs

INVENTOR(S): Pero, Ronald W.
PATENT ASSIGNEE(S): Oxigene, Inc., USA
SOURCE: PCT Int. Appl., 81 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PAT	CENT 1	NO.		KI	ND	DATE			A	PPLI	CATI	и ис	ο.	DATE			
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															KG,			
			LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,
			PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	UA,	UG,	UZ,
			VN,	YU,	ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM	•	•	•	•
		RW:	GH,	KE,	LS,	MW,	SD,	SZ,	UG,	ZW,	AT,	BE,	CH,	DE,	DK,	ES,	FI,	FR,
			GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,
			GN,	ML,	MR,	NE,	SN,	TD,	TG		·	•	·	·	·	•	•	•
	CA	2258	965	•	A	Ą	1998	0108		C.	A 19	97-2	2589	65	1997	0623		
	ΑU	9734	075		Α	1	1998	0121		A	U 19	97-3	4075		1997	0623		
		7381																
	ΕP	9543	27		А	1	1999	1110		Ε	P 19	97-9	3018	4	1997	0623		
															NL,		MC,	PT,
			IE,	SI,	LT,	LV,	FI,	RO	•		•	•	·	·	•	•	•	•
	JP	2000								J	P 19	98-5	0422	3	1997	0623		
PRIOR	RIT	APP	LN.	INFO	. :				;	US 1	996-	6733	41	A	1996	0628		
									1	WO 1	997-1	US10	829	W	1997	0623		

OTHER SOURCE(S): MARPAT 128:119675

Disclosed are methods and formulations for administering acid addn. salts of compds. of R1(CH2)nN+HR2R3.cntdot.X- or R1(CH2)nN+R2R3R4.cntdot.X-, wherein R1 comprises an aryl or alkyl group with a hydrogen bond acceptor site accessible to interaction with the tertiary nitrogen or the quaternary ammonium ion, R2, R3 and R4 are alkyl or aryl groups, and X is an anion. A sterile injectable formulation of a liq. vehicle contg. the acid addn. salt in soln. is adjusted in pH for reducing the development of undesirable side effects of the compd. or provided at a pH 5.5-7.0. An i.m. injection contg. the salt at .gtoreq.50 mg/mL and at a pH 5.5-7.0, is safely administered. UV spectral anal. of metoclopramide (I) solns. adjusted in pH 4.8-6.0 showed a very sharp change in maximal absorption of I solns. around pH 5, indicating shifting of equil. between the 2 conformational forms of I, namely, one with the pH sensitive hydrogen bond present and one without it.

IT 65-23-6D, Pyridoxine, acid addn. salts 91636-68-9D, acid addn. salts

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pH-controlled i.m. injections for acid addn. salts of drugs to avoid side effects)

65-23-6 CAPLUS RN

CN 3,4-Pyridinedimethanol, 5-hydroxy-6-methyl- (9CI) (CA INDEX NAME)

91636-68-9 CAPLUS RN

3-Pyridinecarboxamide, N-[2-(diethylamino)ethyl]- (9CI) (CA INDEX NAME) CN

L118 ANSWER 15 OF 23 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1998:42296 CAPLUS

DOCUMENT NUMBER:

128:106441

TITLE: INVENTOR(S): Lectin compositions and uses thereof

Pusztai, Arpad Janos; Bardocz, Zsuszanna Magdolna;

Palmer, Richard Michael John; Fish, Neil William;

Koteles, Gyorgy J.

PATENT ASSIGNEE(S):

Alizyme Therapeutics Ltd., UK; Pusztai, Arpad Janos;

Bardocz, Zsuszanna Magdolna; Palmer, Richard Michael

John; Fish, Neil William; Koteles, Gyorgy J.

SOURCE: PCT Int. Appl., 74 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PA:	rent	NO.		KI	ND 	DATE			A:	PPLI	CATI	ON N	o. 	DATE	<b>-</b>		
WO	9749	420		A	1	1997	1231		W	0 19	97-G	B166	8	19970	0620		
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		DK,	EE,	ES,	FI,	GB,	GE,	GH,	HU,	IL,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,
		LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NΖ,	PL,
		PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	UA,	UG,	US,
		UZ,	VN,	YU,	ZW,	ΑM,	AZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM			
	RW:	GH,	ΚE,	LS,	MW,	SD,	SZ,	ŪG,	ZW,	ΑT,	BE,	CH,	DE,	DK,	ES,	FI,	FR,
		GB,	GR,	ΙE,	ΙT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,
		GN,	ML,	MR,	ΝE,	SN,	TD,	ΤG									
CA	2258	503		A.	A	1997	1231		C	A 19	97-2	2585	03	1997	0620		
ΑU	9731	832		A	1	1998	0114		A	U 19	97-3	1832		1997	0620		
ΑU	7383	86		В	2	2001	0920										
EΡ	9427	41		Α	1	1999	0922		E	P 19	97-9	2728	2	1997	0620		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

CN 1230891 19991006 CN 1997-196837 19970620 Α JP 1998-502524 JP 2001510447 T2 20010731 19970620 Α 19990219 NO 1998-5980 19981218 NO 9805980 20000425 KR 1998-710759 19981221 KR 2000022334 Α GB 1996-13070 Α 19960621 PRIORITY APPLN. INFO .: WO 1997-GB1668 W 19970620

AB The invention relates to use of lectins in the manuf. of medicaments for the control of mucosal cell proliferation, for the redn. and/or treatment of damage caused by a cell-damaging agent and for the redn. and/or treatment of metabolic disorders, as well as compns. and diets comprising lectins, their use in medical and non-medical fields and the use of soya waste products, in particular the soya whey fraction, in the manuf. of the above medicaments and compns.

IT 68302-57-8, Amlexanox

RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(lectin compns. for control of mucosal cell proliferation)

RN 68302-57-8 CAPLUS

CN 5H-[1]Benzopyrano[2,3-b]pyridine-3-carboxylic acid, 2-amino-7-(1-methylethyl)-5-oxo- (9CI) (CA INDEX NAME)

L118 ANSWER 16 OF 23 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1997:750278 CAPLUS

DOCUMENT NUMBER: 127:326587

TITLE: Method of anti-ischemic protection of limb tissues at

surgeries and traumas

INVENTOR(S): Grishin, Ivan Grigorevich; Lvov, Sergej Evtikhievich

PATENT ASSIGNEE(S): Kodin, Andrej Valerevich, Belarus; Ivanovskij

Gosudarstvennyj Meditsinskij Institut Im.A.S.Bubnova

SOURCE: Russ. From: Izobreteniya 1997, (18), 64-65.

Patent

CODEN: RUXXE7

DOCUMENT TYPE:

LANGUAGE: Russian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2082396	C1	19970627	RU 1993-29510	19930524

AB Title only translated.

IT 437-74-1, Complamin

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (method of anti-ischemic protection of limb tissues at surgeries and traumas)

RN 437-74-1 CAPLUS

CN 3-Pyridinecarboxylic acid, compd. with 3,7-dihydro-7-[2-hydroxy-3-[(2-hydroxyethyl)methylamino]propyl]-1,3-dimethyl-1H-purine-2,6-dione (1:1) (9CI) (CA INDEX NAME)

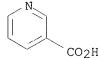
CM 1

Page 56

CRN 2530-97-4 CMF C13 H21 N5 O4

CM 2

CRN 59-67-6 CMF C6 H5 N O2



L118 ANSWER 17 OF 23 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1997:453147 CAPLUS

DOCUMENT NUMBER: 127:171291

TITLE: Protective effects of CD-832 on organ damage in

stroke-prone spontaneously hypertensive rats

Alimilo (a)

AUTHOR(S): Takahashi, Teisuke; Tanikawa, Satomi; Takahashi, Kenzo CORPORATE SOURCE: 1 ST Laboratory, Medical Research Laboratories, Taisho

Pharmaceutical Co., Ltd., 1-403, Yoshino-cho, Ohmiya,

Saitama, 330, Japan

SOURCE: Eur. J. Pharmacol. (1997), 331(2/3), 193-198

CODEN: EJPHAZ; ISSN: 0014-2999

PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AΒ Effects of a newly developed Ca2+ channel antagonist, (4R)-(-)-2-(nicotinoylamino)ethyl 3 nitrooxypropyl 1,4-dihydro-2,6-dimethyl-4-(3nitrophenyl) 3,5-pyridine-dicarboxylate (CD-832), on hypertensive complications in stroke-prone spontaneously hypertensive rats (SHRSPs) were compared with effects of diltiazem. We examd. changes in histol. and hematol. parameters in SHRSPs given the following treatments at 8 to 20 wk of age: (a) CD-832; (b) diltiazem; (c) no treatment. CD-832 and diltiazem were added to the diet, in doses of 0.05 and 0.15% (approx. 30 and 100 mg/kg per day), resp., throughout the exptl. period. In untreated control SHRSPs, systolic blood pressure increased and severe renal lesions such as fibrinoid necrosis, smooth muscle proliferation, glomerular and tubular lesions and some cardiac fibrosis were obsd. at age 20 wk. 12-wk repeated-administration of CD-832 and diltiazem led to a comparable hypotension and decreased heart rate. CD-832 and diltiazem decreased the ratios of wts. of kidney and heart to body wt. and the concn. of blood urea nitrogen and creatinine in serum, compared to values in controls. SHRSPs treated with CD-832 and diltiazem, the incidence of renal lesions and myocardial fibrosis was significantly reduced when compared with control SHRSPs. These results suggest that 12-wk repeated-administration of CD-832 prevents the development of hypertension and the incidence of

organ damage in SHRSPs. CD-832 and diltiazem were equally efficacious in preventing organ damage but this organ-protective effect was obtained at a lower dose for CD-832 (30 mg/kg per day) than that of diltiazem (100 mg/kg per day).

IT **148200-22-0**, CD-832

RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (calcium channel blocker CD-832 protective effects on

organ damage in stroke-prone spontaneously hypertensive rats)

RN 148200-22-0 CAPLUS

CN 3,5-Pyridinedicarboxylic acid, 1,4-dihydro-2,6-dimethyl-4-(3-nitrophenyl), 3-(nitrooxy)propyl 2-[(3-pyridinylcarbonyl)amino]ethyl ester, (4R)(9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$O_2N$$
 $O_2N$ 
 $O_2N$ 
 $O_3$ 
 $O_4$ 
 $O_4$ 
 $O_5$ 
 $O_5$ 
 $O_6$ 
 $O_7$ 
 $O_8$ 
 $O$ 

L118 ANSWER 18 OF 23 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1997:436213 CAPLUS

DOCUMENT NUMBER: 127:55919

TITLE: Hydroxylamine derivatives useful for enhancing

molecular chaperon production and the preparation

thereof

INVENTOR(S): Vigh, Laszlo; Literati Nagy, Peter; Szilbereky, Jeno;

Uerogdi, Laszlo; Jednakovits, Andrea; Jaszlits, Laszlo; Biro, Katalin; Marvanyos, Ede; Barabas,

Mihaly; Hegedues, Erzsebet; Koranyi, Laszlo; Kuerthy, Maria; Balogh, Gabor; Horvath, Ibolya; Torok, Zsolt; Udvardy, Eva; Dorman, Gyorgy; Medzihradszky, Denes; Mezes, Bea; Kovacs, Eszter; Duda, Erno; Farkas,

Beatrix; Glatz, Attila; et al.

PATENT ASSIGNEE(S): Hung.

SOURCE: PCT Int. Appl., 179 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	CENT I	NO.		KI	ND	DATE			Al	PPLI	CATI	ON NO	٥.	DATE				
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WO	9716	439		A.	L	1997	0509		W	19	96 <b>-</b> H	U64		1996	1101			
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		•	-	UA,														
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HU	7665	9		A2	2	1997	1028		H	J 19	95-3	141		1995	1102			
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ΑU	9673	263		A.	L	1997	0522		ΙA	J 19	96-7	3263		1996	1101			
ΑU	7201	95		B	2	2000	0525											

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EP 801649
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                       Α
                                            CN 1996-192305
                                                             19961101
     BR 9607565
                            19990720
                       Α
                                            BR 1996-7565
                                                             19961101
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                            19970902
                       Α
                                            NO 1997-3059
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PRIORITY APPLN. INFO.:
                                         HU 1995-3141
                                                            19951102
                                                          Α
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                                                          A 19960209
                                         HU 1996-29820
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                                                            19961004
                                         WO 1996-HU64
                                                            19961101
                                         WO 1996-HU664
                                                             19961101
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OTHER SOURCE(S): MARPAT 127:55919

A method of increasing expression of a mol. chaperon by a cell and/or enhancing the activity of a mol. chaperon in cells is provided. The method comprises treating a cell that is exposed to a physiol. stress which induces expression of a mol. chaperon by the cell with an effective amt. of a certain hydroxylamine deriv. to increase the stress. Alternatively, a hydroxylamine deriv. can be administrated to a cell before it is exposed to a physiol. stress which induces expression of a mol. chaperon by the cell. Preferably, the cell to which a hydroxylamine deriv. is administered is a eukaryotic cell. The invention also provides novel hydroxylamine derivs. falling within the scope of the formulas AZC(X):NOR (A = alkyl, substituted alkyl, aralkyl, substituted aralkyl, heteroaryl, etc.; Z = covalent bond, O, or NR3, where R3 = H, alkyl, substituted alkyl, aryl, etc.; R = alkyl or substituted alkyl; X = halo, substituted hydroxy or amino, substituted amino; R' = H, alkyl, substituted alkyl, aryl, substituted aryl, etc.) and AZC(:X)N(R')OR (A = alkyl, substituted alkyl, aralkyl, substituted aralkyl, heteroaryl, etc.; Z = covalent bond, O, or NR3, where R3 = H, alkyl, substituted alkyl,aryl, etc.; R = alkyl or substituted alkyl; X =0, imino, or substituted imino; R' = H, alkyl, substituted alkyl, aryl, substituted aryl, etc.) as well as pharmaceutical and/or cosmetic compns. comprising the said compds.

IT 191159-62-3P

> RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(hydroxylamine derivs. useful for enhancing mol. chaperon prodn. and the prepn. thereof)

RN191159-62-3 CAPLUS

> 3-Pyridinecarboxylic acid, 1-[[[(imino-3-pyridinylmethyl)amino]oxy]methyl]-2-(1-piperidinyl)ethyl ester, (22)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

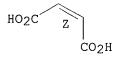
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CN

CRN 191159-61-2 CMF C20 H25 N5 O3

CRN 110-16-7 CMF C4 H4 O4 CDES 2:Z

Double bond geometry as shown.



L118 ANSWER 19 OF 23 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1997:350267 CAPLUS

DOCUMENT NUMBER: 127:13268

TITLE: Effects of chloride channel blockers on hypoxic injury

in rat proximal tubules

AUTHOR(S): Reeves, W. Brian

CORPORATE SOURCE: Division of Nephrology, University of Arkansas for

Medical Sciences and J.L. McClellan Memorial Veterans

Hospital, Little Rock, AR, USA

SOURCE: Kidney Int. (1997), 51(5), 1529-1534

CODEN: KDYIA5; ISSN: 0085-2538

PUBLISHER: Blackwell DOCUMENT TYPE: Journal LANGUAGE: English

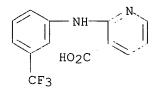
These studies examd. the pathways and consequences of chloride uptake into AB proximal tubule cells during in vitro hypoxia. The chloride channel blocker diphenylamine-2-carboxylate (DPC) markedly reduced the degree of hypoxia-induced membrane damage as measured by the release of lactate dehydrogenase (LDH). DPC reduced the release of LDH from hypoxic tubules from 38 .+-. 2.7% to 16 .+-. 1.7% after 30 min of hypoxia (P < 0.001, N = 0.00116) and also reduced 36Cl- uptake by hypoxic tubules. The redn. in LDH release was not assocd. with better preservation of cell ATP content or with protection against hypoxia-induced DNA damage. Other Cl- channel blockers, such as niflumic acid, 5-nitro-2-(3-phenylpropylamino)-benzoate (NPPB) and 2-[(2-cyclopentyl-6,7-dichloro-2,3-dihydro-2-methyl-1-oxo-1Hinden-5-yl)oxy] acetic acid (IAA-94) provided even greater protection than DPC and were as effective as 2 mM glycine. The Cl- channel blockers appear to act late in the course of hypoxic injury since DNA damage, an early manifestation of injury, is not prevented by the blockers and since addn. of the Cl- channel blocker after the hypoxic injury has begun reduces further membrane damage. These results support the conclusion that transport through C1- channels contributes to hypoxic cell injury in proximal tubular cells.

TT 4394-00-7, Niflumic acid

RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (cytoprotective effects of chloride channel blockers on hypoxic injury in rat proximal tubules)

RN 4394-00-7 CAPLUS

CN 3-Pyridinecarboxylic acid, 2-[[3-(trifluoromethyl)phenyl]amino]- (9CI) (CA INDEX NAME)



L118 ANSWER 20 OF 23 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1997:328447 CAPLUS

DOCUMENT NUMBER: 127:29048

TITLE: Diverse cytoprotectants prevent cell lysis and promote

recovery of respiration and ion transport

AUTHOR(S): Moran, Jeffery H.; Schnellmann, Rick G.

CORPORATE SOURCE: Department of Pharmacology and Toxicology, University

of Arkansas for Medical Sciences, Little Rock, AR,

72205-7199, USA

SOURCE: Biochem. Biophys. Res. Commun. (1997), 234(1), 275-277

CODEN: BBRCA9; ISSN: 0006-291X

PUBLISHER: Academic DOCUMENT TYPE: Journal LANGUAGE: English

AR Numerous agents have been reported to prevent cell lysis. However, little information is available concerning the ability of cytoprotectants to promote the return of physiol. functions. The goal of this study was to det. whether a diverse group of cytoprotectants prevent cell lysis and promote the recovery of respiration and ion transport following anoxia (60 min)/reoxygenation (60 min) in rabbit renal proximal tubule (RPT) suspensions. Cell lysis (LDH release) was detd. immediately following the anoxic and reoxygenation periods. Mitochondrial function (basal respiration) and active Na+ transport (ouabain-sensitive respiration) was detd. after the reoxygenation period. LDH release increased to 75 .+-. 11% after the anoxic period and did not increase further during the reoxygenation period. LDH release in controls was 6 .+-. 1% and did not vary over time. Glycine (2 mM), strychnine (1 mM), nifedipine (100 .mu.M) and niflumic acid (100 .mu.M) added immediately prior to the anoxic period completely blocked LDH release. All cytoprotectants increased basal respiration from 39 .+-. 7% of controls in the anoxic samples to 65-77% of controls. Glycine, strychnine and nifedipine increased ouabain-sensitive respiration from 10 .+-. 3% of controls in anoxic samples to 51-77% of control. Niflumic acid did not increase ouabain-sensitive respiration. These results demonstrate that glycine, strychnine and nifedipine are "true" cytoprotectants preventing both cell lysis and promoting the recovery of mitochondrial function and ion transport after an anoxic insult.

4394-00-7, Niflumic acid

RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (diverse cytoprotectants prevent cell lysis and promote recovery of respiration and ion transport)

RN 4394-00-7 CAPLUS

ΙT

CN

3-Pyridinecarboxylic acid, 2-[[3-(trifluoromethyl)phenyl]amino]- (9CI) (CA INDEX NAME)

L118 ANSWER 21 OF 23 CAPLUS COPYRIGHT 2002 ACS 1995:971386 CAPLUS ACCESSION NUMBER:

124:75596 DOCUMENT NUMBER:

The prevalence of side effects with regular and TITLE:

sustained-release nicotinic acid

Gibbons, Larry W.; Gonzalez, Veronica; Gordon, Neil; AUTHOR(S):

Grundy, Scott

CORPORATE SOURCE: Southwestern Medical School, University Texas, Dallas,

TX, USA

SOURCE: Am. J. Med. (1995), 99(4), 378-85

CODEN: AJMEAZ; ISSN: 0002-9343

DOCUMENT TYPE: Journal English LANGUAGE:

Our objective was to document the prevalence and nature of the side effects that occur with the use of regular and sustained-release nicotinic acid in everyday clin. practice. The occurrence of side effects, particularly those severe enough to warrant discontinuing the drug, were carefully monitored. Forty-three percent of individuals given regular nicotinic acid and 42% of those given sustained-release nicotinic acid were forced to discontinue the medication because of side effects; some of these side effects necessitating discontinuing nicotinic acid did not occur until the patient had been taking the drug for 1 or 2 yr. Nicotinic acid in both regular and sustained-release forms is a powerful drug when used in doses needed to treat lipid disorders and causes disturbing side effects a very high percentage of the time. No one should use nicotinic: acid in these doses without continued careful supervision of a physician.

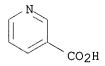
59-67-6, Nicotinic acid, biological studies ITRL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(prevalence of side effects with regular and

sustained-release nicotinic acid)

RN 59-67-6 CAPLUS

3-Pyridinecarboxylic acid (9CI) (CA INDEX NAME) CN



L118 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2002 ACS 1994:645767 CAPLUS

ACCESSION NUMBER:

121:245767 DOCUMENT NUMBER:

TITLE: Cytoprotective effects of nicorandil on hypothermic injury to immature cardiac myocytes. Comparison with

nitroglycerin, diltiazem and prostaglandin El

AUTHOR(S): Orita, Hiroyuki; Fukasawa, Manabu; Hirooka, Shiqeki;

Uchino, Hideaki; Fukui, Kana; Kohi, Minoru; Washio,

Masahiko

School of Medicine, Yamagata University, Yamagata, CORPORATE SOURCE:

990-23, Japan

SOURCE: Jpn. Circ. J. (1994), 58(8), 653-61

CODEN: JCIRA2; ISSN: 0047-1828

DOCUMENT TYPE: Journal LANGUAGE: English

The purpose of this study was to evaluate the functional and biochem. AB effects of nicorandil (NRD), nitroglycerin (NTG), diltiazem (DTZ) and prostaglandin El (PGE) on cardiac myocytes incubated under hypothermic conditions. Cardiac myocytes were isolated from neonatal rat ventricles and cultured for 4 days with MCDB 107 medium. Myocytes (12.5 .times. 105 myocytes/flask) were then incubated at 4.degree.C for 24 h in media contg. various concns. of NRD, NTG, DTZ or PGE. After hypothermic incubation, creatine kinase (CK) and lactate dehydrogenase (LDH) were measured. The myocytes were cultured for an addnl. 24 h at 37.degree.C to evaluate the recovery of myocyte beating rate. In the nicorandil groups, 10-4 M NRD showed a significantly increased beating rate recovery compared to the control (44% vs 25% resp., as a percentage of the baseline values; i.e., beating rate prior to hypothermic incubation). Although treatment with 10-6 M diltiazem showed no beneficial effects (10-6 M; 25%, control; 30%), beating was not obsd. at all with 10-4 M or 10-5 M DTZ. There were no significant changes among the NTG and PGE groups. The release of CK and LDH was significantly suppressed with 10-4 M NRD (10-4 M: 24.1 mIU/flask, 257.2; control: 125.4, 459.5, resp.). In contrast, 10-4 M DTZ showed significantly increased CK and LDH levels compared to its resp. control (10-4 M: 203.3 mIU/flask, 883.4; control: 112.3, 457.4, resp.). There were no significant differences in CK and LDH levels among the NTG and PGE groups. In conclusion, nicorandil has protective effects on immature myocytes that may make it suitable for cardiac preservation in the neonatal period.

IT65141-46-0, Nicorandil

> RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (cytoprotective effects of nicorandil on hypothermic injury to immature cardiac myocytes and comparison with nitroglycerin, diltiazem and prostaglandin E1)

RN 65141-46-0 CAPLUS

3-Pyridinecarboxamide, N-[2-(nitrooxy)ethyl]- (9CI) (CA INDEX NAME) CN

L118 ANSWER 23 OF 23 CAPLUS COPYRIGHT 2002 ACS

1988:49165 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 108:49165

TITLE: Anticonvulsant efficacy of clonazepam and the

.beta.-carboline ZK 93423 during chronic treatment in

amygdala-kindled rats

AUTHOR(S): Loescher, Wolfgang; Hoenack, Dagmar; Hashem, Ayman CORPORATE SOURCE:

Sch. Vet. Med., Free Univ. Berlin, Berlin, Fed. Rep.

SOURCE: Eur. J. Pharmacol. (1987), 143(3), 403-14

CODEN: EJPHAZ; ISSN: 0014-2999

DOCUMENT TYPE: Journal LANGUAGE: English

GI

Ι

The effects of chronic treatment with the benzodiazeine clonazepam and the .beta.-carboline ZK 93423 (I), a full agonist at brain benzodiazepine receptors, on amygdala-kindled seizures in rats were examd. Clonazepam and I were administered 3 times daily at a dose of 1 or 5 mg/kg i.p., resp., for 2 wk. During this treatment period, both compds. reduced seizure severity without indication of tolerance. However, the marked initial effects on seizure duration and/or duration of afterdischarges recorded from the amygdala were attenuated or lost during the 2 wk of treatment. A pronounced tolerance was also obsd. with respect to side effects (sedation, ataxia, muscle relaxation) occurring during treatment... Plasma drug level detns. suggested that the tolerance was of functional nature. Compared to benzodiazepines, the .beta.-carboline I has no advantage in terms of anticonvulsant potency, side effects, or development of tolerance.

IT **83910-44-5**, ZK 93423

RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (anticonvulsant activity of, side effects and tolerance in relation to)

RN 83910-44-5 CAPLUS

CN

9H-Pyrido[3,4-b]indole-3-carboxylic acid, 4-(methoxymethyl)-6-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)

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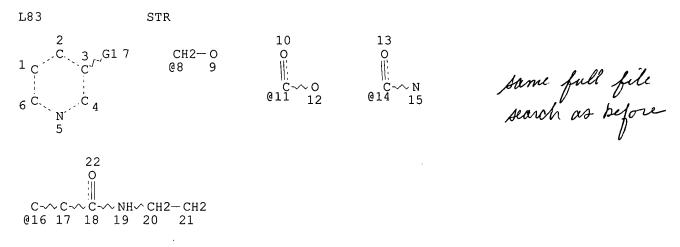
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The P indicator for Preparations was not generated for all of the CAS Registry Numbers that were added to the H/Z/CA/CAplus files between 12/27/01 and 1/23/02. Use of the P indicator in online and SDI searches during this period, either directly appended to a CAS Registry Number or by qualifying an L-number with /P, may have yielded incomplete results. As of 1/23/02, the situation has been resolved. Also, note that searches conducted using the PREP role indicator were not affected.

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VAR G1=8/11/14/16 NODE ATTRIBUTES: CONNECT IS E2 RC AT 16 CONNECT IS E2 RC AT 17 DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

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STEREO ATTRIBUTES: NONE

97689 SEA FILE=REGISTRY SSS FUL L83 L108 STR

38 39

Ph= phencyl Ch = carbocycle

Page 1-A

subset search done on this structure

Page 2-A VAR G1=20/35/54 VAR G2=58/61 NODE ATTRIBUTES:

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DEFAULT ECLEVEL IS LIMITED

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5 ANSWERS

=> fil capl; d que nos 1111

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FILE COVERS 1907 - 8 Feb 2002 VOL 136 ISS 7 FILE LAST UPDATED: 7 Feb 2002 (20020207/ED)

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The P indicator for Preparations was not generated for all of the CAS Registry Numbers that were added to the CAS files between 12/27/01 and 1/23/02. As of 1/23/02, the situation has been resolved. Searches and/or SDIs in the H/Z/CA/CAplus files incorporating CAS Registry Numbers with the P indicator executed between 12/27/01 and 1/23/02 may be incomplete. See the NEWS message on this topic for more information.

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L111 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1999:690954 CAPLUS

DOCUMENT NUMBER: 131:307106

TITLE: Use of vitamin PP compounds as cytoprotective agents

in chemotherapy

INVENTOR(S): Biedermann, Elfi; Hasham, Max; Loger, Roland; Rattel

Benno; Reiter, Friedemann; Schein, Barbara; Schemainda, Isabel; Seibel, Klaus; Vogt, Klaus;

Wosikowski, Katja

PATENT ASSIGNEE(S): Klinge Pharma GmbH, Germany

SOURCE: PCT Int. Appl., 145 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

Searched by Barb O'Bryen STIC 308-4291

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PRIORITY APPLN. INFO.:
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                                          WO 1999-EP2686
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                                                               19990421
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                                          WO 2000-EP1628
                          MARPAT 131:307106
OTHER SOURCE(S):
     The invention relates to the use of vitamin PP compds. and/or compds. with
     anti-pellagra activity such as for example nicotinic acid (niacin), and
     nicotinamide (niacin-amide, vitamin PP, vitamin B3) for the redn.,
     elimination or prevention of side-effects of different degrees as well as
     for neutralization of acute side-effects in immunosuppressive or
     cancerostatic chemotherapy or diagnosis, esp. with substituted pyridine
     carboxamides, as well as combination medicaments with an amt. of compds.
     with vitamin B3 and/or anti-pellagra activity and chemotherapeutic agents
     are esp. considered in the mentioned chemotherapies and indications.
     Nicotinamide at 500 mg/kg twice daily protected mice treated i.p. with
     antitumor N-[4-(1-diphenylmethylpiperidin-4-yl)butyl]-3-(pyridin-3-
     yl)propionamide. There were no deaths in the nicotinamide-treated mice
     and the strong redn. of leukocytes was completely prevented.
     200868-24-2 201159-47-9 247240-89-7
ΙT
     247240-97-7 247241-00-5
     RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (vitamin PP compds. as cytoprotective agents in chemotherapy)
RN
     200868-24-2 CAPLUS
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3-Pyridinepropanamide, N-[4-[1-[(9-oxo-9H-fluoren-4-yl)carbonyl]-4-

piperidinyl]butyl]- (9CI) (CA INDEX NAME)

CN

PAGE 1-A

PAGE 2-A

RN 201159-47-9 CAPLUS

CN 2-Propenamide, N-[4-[1-(9-anthracenylmethyl)-4-piperidinyl]butyl]-3-(3-pyridinyl)- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 247240-89-7 CAPLUS

CN 3-Pyridinepropanamide, N-[2-[1-(phenylmethyl)-4-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)

RN 247240-97-7 CAPLUS

CN 3-Pyridinepropanamide, N-[2-[1-(diphenylmethyl)-4-piperidinyl]ethyl](9CI) (CA INDEX NAME)

RN 247241-00-5 CAPLUS

CN 2-Propenamide, N-[4-[1-(1-naphthalenylmethyl)-4-piperidinyl]butyl]-3-(3-

pyridinyl) - (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L111 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1998:31303 CAPLUS

DOCUMENT NUMBER: 128:88788

TITLE: Preparation of N-[(azacycloalkyl)alkyl]pyridinealkanam

ides as antitumor agents and immunosuppressants

INVENTOR(S): Biedermann, Elfi; Hasmann, Max; Loser, Roland; Rattel,

Benno; Reiter, Friedemann; Schein, Barbara; Seibel,

Klaus; Vogt, Klaus

PATENT ASSIGNEE(S): Klinge Pharma G.m.b.H., Germany; Biedermann, Elfi;

Hasmann, Max; Loser, Roland; Rattel, Benno; Reiter, Friedemann; Schein, Barbara; Seibel, Klaus; Vogt,

Klaus

SOURCE: PCT Int. Appl., 220 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

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PATENT NO.
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     EP 934309
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             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
                                           JP 1998-502316
     JP 2000512651
                       Т2
                            20000926
                                                            19970620
                                        DE 1996-19624704 A 19960620
PRIORITY APPLN. INFO.:
                                        WO 1997-EP3243
                                                       W 19970620
                         MARPAT 128:88788
OTHER SOURCE(S):
     R1ZCONR4Z1Z2R2 [I; R1 = (1-oxido)(un)substituted 3-pyridyl; <math>R2 = H,
     Z3(CH2)r(CR14R15)sR13, COR16, etc.; R4 = H, alkyl, alkoxy, etc.; R13, R14 = H
     H, alkyl, (hetero)aryl, etc.; R15 = H, OH, Me, Ph, CH2Ph; R16 = CF3,
     alkoxy, OCH2Ph; Z = cyclopropylene, alkylene which may be interrupted by
     O, CO, NH, etc.; Z1 = (un)substituted alk(en)ylene, etc.; Z2 = N-attached
     (un) substituted (ox) azacycloalkylene; Z3 = bond or CO; r = 0-3; s = 0 or
     1] were prepd. Thus, 4-piperidinebutanol was N-alkylated by Ph2CHBr and
     the product converted in 2 steps to H2N(CH2)4Z2CHPh2 (Z2 =
     piperidine-4,1-diyl) which was amidated by 3-pyridinepropionic acid to
     qive R1CH2CH2CONH(CH2)4Z2CHPh2 (R1 = 3-pyridyl, Z2 = piperidine-4,1-diyl).
     Data for biol. activity of I were given.
IT
     200868-24-2P
     RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (prepn. of N-[(azacycloalkyl)alkyl]pyridinealkanamides as antitumor
        agents and immunosuppressants)
```

3-Pyridinepropanamide, N-[4-[1-[(9-oxo-9H-fluoren-4-yl)carbonyl]-4-

RN

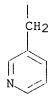
CN

200868-24-2 CAPLUS

piperidinyl]butyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A



L111 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1998:28656 CAPLUS

DOCUMENT NUMBER:

128:102008

TITLE:

Preparation and formulation of pyridine derivatives as

INVENTOR(S):

antitumor agents and immunosuppressants

Biedermann, Elfi; Hasmann, Max; Loser, Roland; Rattel, Benno; Reiter, Friedemann; Schein, Barbara; Seibel,

Klaus; Vogt, Klaus

PATENT ASSIGNEE(S):

Klinge Pharma G.m.b.H., Germany; Biedermann, Elfi; Hasmann, Max; Loser, Roland; Rattel, Benno; Reiter, Friedemann; Schein, Barbara; Seibel, Klaus; Vogt,

Klaus

SOURCE:

PCT Int. Appl., 267 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE Jones Page 73

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19970620
     WO 9748397
                              19971224
                                               WO 1997-EP3244
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         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ,
              LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL,
              PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
                                                                      UA, UG, US,
              UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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PRIORITY APPLN. INFO.:
                                            DE 1996-19624668 A 19960620
                                            WO 1997-EP3244
                                                              W 19970620
OTHER SOURCE(S):
                           MARPAT 128:102008
GΙ
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$$R^2$$
 $R^3$ 
 $R^4$ 
 $ACON-DEG$ 
 $N$ 
 $(O)_{n}$ 

$$CH = CH - CO - N - CH - Ph$$

$$N - CH - Ph$$

AΒ The title compd. I [R1 = H, halo, cyano, etc.; R2 = H, halo, hydroxy, alkyl, etc.; R3 = H, halo, alkyl, etc.; R4 = H, hydroxy, benzyloxy, etc.; n = 0 or 1; A = alkylene, etc.; D = alkylene, etc.; E = piperidine ring (generic structure given), etc.; G = H, etc.] are prepd. The title compd. II in vitro showed IC50 of 0.008 .mu.M against the WERI-Rb-1 retinoblastoma cells.

ΙT 201159-47-9P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

II

(prepn. of pyridine derivs. as antitumor agents and immunosuppressants) 201159-47-9 CAPLUS RN

CN 2-Propenamide, N-[4-[1-(9-anthracenylmethyl)-4-piperidinyl]butyl]-3-(3pyridinyl) - (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

FILE 'USPATFULL' ENTERED AT 15:29:48 ON 08 FEB 2002 CA INDEXING COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 7 Feb 2002 (20020207/PD) FILE LAST UPDATED: 7 Feb 2002 (20020207/ED) HIGHEST GRANTED PATENT NUMBER: US6330719 HIGHEST APPLICATION PUBLICATION NUMBER: US2002016983 CA INDEXING IS CURRENT THROUGH 7 Feb 2002 (20020207/UPCA) ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 7 Feb 2002 (20020207/PD) REVISED CLASS FIELDS (/NCL) LAST RELOADED: Dec 2001 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2001

- >>> Page images are available for patents from 1/1/1998. Patents <<<
- >>> and applications are typically loaded on the day of publication.<<<
- >>> Page images are available for display by the following day.
- >>> Image data for the /FA field are available the following update.<<<
- >>> Complete CA file indexing for chemical patents (or equivalents) <<<
- >>> is included in file records. A thesaurus is available for the <<<
- >>> USPTO Manual of Classifications in the /NCL, /INCL, and /RPCL <<<
- >>> fields. This thesaurus includes catchword terms from the <<<

>>> USPTO/MOC subject headings and subheadings. Thesauri are also <<<
>>> available for the WIPO International Patent Classification <<<
>>> (IPC) Manuals, editions 1-6, in the /IC1, /IC2, /IC3, /IC4, <<<
>>> /IC5, and /IC (/IC6) fields, respectively. The thesauri in <>> the /IC5 and /IC fields include the corresponding catchword <>> terms from the IPC subject headings and subheadings. <<

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L85	97689	SEA	FILE=REGISTRY	SSS	FUL	L83		
L108		STR						
L110	5	SEA	FILE=REGISTRY	SUB=	L85	SSS	FUL	L108
EL112	0_	SEA	FILE=USPATFULL	ABE	B=ON	L11	0 -	E.
1 Linear Marie III					***			

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FILE COVERS 1907-1966 FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

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L108	STR	
L110	5 SEA FILE=REGISTRY SUB=L85 SSS FUL L108	
FL113	O SEA FILE=CAOLD ABB=ON L110	

FILE 'HOME' ENTERED AT 15:29:49 ON 08 FEB 2002

THE PUGS DISTA (LEPTO)

 $n\hbox{-}[2\hbox{-}(1\hbox{-}benzylpiperidin\hbox{-}4\hbox{-}yl)ethyl]\hbox{-}3\hbox{-}(pyridin\hbox{-}3\hbox{-}yl)propionamide}$ 

 $n\hbox{-}[2\hbox{-}(1diphenylmethylpiperidin-}4\hbox{-}yl)ethyl]\hbox{-}3\hbox{-}(pyridin-}3\hbox{-}yl)propionamide$ 

n-{4-[1-{9-anthrylmethyl)piperidin-4-yl]butyl}-3-(pyridin-3-yl)-acrylamide

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PATENT NO.
                      KIND
                            DATE
                                           APPLICATION NO.
     WO 2002024679
                            20020328
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                       A1
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         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
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                            20020416
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PRAI JP 2000-289173
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     MARPAT 136:279345
OS
GΙ
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$$R^{2}$$
 $R^{3}$ 
 $R^{4}$ 
 $R^{4}$ 
 $R^{5}$ 
 $R^{5}$ 

AB Pyridines I [R = 3-hydroxy-2-pyridyl, 3-hydroxy-2-thienyl, (substituted)-2-hydroxyphenyl; R1 = H, halogen; R2 = H, 1,2,3,6-tetrahydropyridyl, (un)substituted amino, etc.; R3 = HO2C, alkylcarbonyl, alkylcarbamoyl, alkylamino, (heteroaryl)hydroxymethyl, (heteroaryl)alkyl, etc.; R4 = (un)substituted amino; R2 and R3 or R3 and R4 may form fused cycloalkyl or bicycloalkyl moieties optionally contg. NH moieties] such as II.HCl were prepd. as I.kappa.B kinase .beta. (IKK) inhibitors for the inhibition of nuclear factor .kappa.B (NF-.kappa.B) activity and the treatment of inflammatory diseases, such as asthma and ischemia; in addn., the compds. are antitumor and immunosuppressant agents. E.g., 2'-benzyloxyacetophenone, tert-Bu 3-formyl-1piperidinecarboxylate, and malononitrile were stirred with NH4OAc in PhMe at 150.degree. to yield aminopyridine II (R5 = PhCH2; R6 = Me3COCO) in 27% yield; removal of the benzyl group with Pd/C followed by removal of the Boc group with HCl in dioxane yielded the monohydrochloride of II (R5 = R6 = H) which showed good in vitro and cellular activities. Over 300 examples are prepd. with biol. data.

IT 406212-82-6P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (prepn. of (hydroxyaryl)pyridines as inhibitors of I.kappa.B kinase .beta. and as antiinflammatory, immunosuppressant, antitumor,

and antiischemic agents) RN 406212-82-6 HCAPLUS

This Pago Diank (uspic)

CN 3-Pyridinecarboxylic acid, 2-amino-6-(2-hydroxyphenyl)-4-(3-piperidinyl)-, 1,1-dimethylethyl ester, monohydrochloride (9CI) (CA INDEX NAME)

HCl

IT 406208-18-2P 406208-22-8P 406208-26-2P 406208-27-3P 406208-31-9P 406208-36-4P 406208-37-5P 406208-40-0P 406208-49-9P 406209-95-8P 406210-62-6P 406210-66-0P 406210-67-1P 406210-68-2P 406210-69-3P 406210-72-8P 406210-73-9P 406210-74-0P 406210-75-1P 406210-76-2P 406210-77-3P 406210-78-4P 406210-79-5P 406210-80-8P 406210-81-9P 406210-82-0P 406210-83-1P 406211-17-4P 406211-18-5P 406211-49-2P 406211-51-6P 406211-56-1P 406211-72-1P 406211-73-2P 406211-74-3P 406211-75-4P 406211-76-5P 406211-78-7P 406211-79-8P 406211-82-3P 406211-83-4P 406211-84-5P 406211-85-6P 406211-86-7P 406211-87-8P 406211-89-0P 406211-90-3P 406211-91-4P 406211-92-5P 406211-93-6P 406211-94-7P 406211-96-9P 406211-97-0P 406211-98-1P 406211-99-2P 406212-00-8P 406212-01-9P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of (hydroxyaryl)pyridines as inhibitors of I.kappa.B kinase .beta. and as antiinflammatory, immunosuppressant, antitumor, and antiischemic agents) RN406208-18-2 HCAPLUS 3-Pyridinemethanol, 2-amino-6-[2-hydroxy-6-(phenylmethoxy)phenyl]-4-(3-CN piperidinyl) - (9CI) (CA INDEX NAME)

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RN 406208-22-8 HCAPLUS

CN 3-Pyridinemethanol, 2-amino-6-(2-hydroxy-6-propoxyphenyl)-4-(3-piperidinyl)- (9CI) (CA INDEX NAME)

RN 406208-26-2 HCAPLUS

CN 3-Pyridinemethanol, 2-amino-6-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-4-(3-piperidinyl)- (9CI) (CA INDEX NAME)

$$CH_2-O$$
 $NH_2$ 
 $CH_2-OH$ 
 $NH$ 
 $NH$ 

RN 406208-27-3 HCAPLUS

CN 3-Pyridinemethanol, 2-amino-6-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-4-(4-piperidinyl)- (9CI) (CA INDEX NAME)

$$CH_2-O$$
 OH  $H_2N$   $HO-CH_2$   $NH$ 

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RN 406208-31-9 HCAPLUS

CN [2,2'-Bipyridine]-5-methanol, 6-amino-3'-hydroxy-4-(3-piperidinyl)- (9CI) (CA INDEX NAME)

RN 406208-36-4 HCAPLUS

CN 3-Pyridinemethanol, 2-amino-6-[2-(2,2-dimethylpropoxy)-6-hydroxyphenyl]-4-(3-piperidinyl)- (9CI) (CA INDEX NAME)

RN 406208-37-5 HCAPLUS

CN [3,4'-Bipyridine]-3'-methanol, 2'-amino-1,2,5,6-tetrahydro-6'-(2-hydroxyphenyl)- (9CI) (CA INDEX NAME)

RN 406208-40-0 HCAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 7-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-1,2-dihydro-2-oxo-5-(3-piperidinyl)- (9CI) (CA INDEX NAME)

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RN 406208-49-9 HCAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 7-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-1,2-dihydro-N-(1-methylethyl)-2-oxo-5-(3-piperidinyl)-(9CI) (CA INDEX NAME)

RN 406209-95-8 HCAPLUS

CN 3-Pyridinecarbonitrile, 2-amino-6-[2-hydroxy-6-(3-pyridinylmethoxy)phenyl]-4-(3-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 406210-62-6 HCAPLUS

CN 3-Pyridinecarboxamide, 2-amino-6-(2-hydroxyphenyl)-4-(3-piperidinyl)-,

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monohydrochloride (9CI) (CA INDEX NAME)

$$H_2N-C$$

● HCl

RN 406210-66-0 HCAPLUS
CN 3-Pyridinecarboxamide, 2-amino-6-(2-hydroxyphenyl)-N-methyl-4-(3-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 406210-67-1 HCAPLUS

CN 3-Pyridinecarboxamide, 2-amino-6-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-N-methyl-4-(3-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

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● HCl

RN 406210-68-2 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-amino-6-(2-hydroxyphenyl)-4-(3-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 406210-69-3 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-amino-6-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-4-(3-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

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HCl

HCl

RN 406210-73-9 HCAPLUS
CN 3-Pyridinemethanol, 2-amino-6-(2-fluoro-6-hydroxyphenyl)-4-(3-piperidinyl), monohydrochloride (9CI) (CA INDEX NAME)

● HCl

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#### HCl

RN 406210-75-1 HCAPLUS

CN [3,4'-Bipyridine]-3'-methanol, 2'-amino-6'-(2-hydroxyphenyl)-1,2,5,6-tetrahydro-, monohydrochloride (9CI) (CA INDEX NAME)

#### ● HCl

RN 406210-76-2 HCAPLUS

CN 3-Pyridinemethanol, 2-amino-6-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-4-(3-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

$$CH_2-O$$
 $NH_2$ 
 $CH_2-OH$ 
 $NH$ 
 $OH$ 

#### • HCl

RN 406210-77-3 HCAPLUS

CN 3-Pyridinemethanol, 2-amino-6-[2-hydroxy-6-(phenylmethoxy)phenyl]-4-(3-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

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● HCl

RN 406210-78-4 HCAPLUS

CN 3-Pyridinemethanol, 2-amino-6-(2-hydroxy-6-propoxyphenyl)-4-(3-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 406210-79-5 HCAPLUS

CN 3-Pyridinemethanol, 2-amino-6-[2-(2,2-dimethylpropoxy)-6-hydroxyphenyl]-4-(3-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 406210-80-8 HCAPLUS

CN 3-Pyridinemethanol, 2-amino-6-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-4-(4-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

Tris Page Dank (uspio)

$$CH_2-O$$
 $H_2N$ 
 $HO-CH_2$ 
 $NH$ 

● HCl

RN 406210-81-9 HCAPLUS
CN 3-Pyridinemethanol, 2-amino-6-(2-hydroxy-6-propoxyphenyl)-4-(4-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 406210-82-0 HCAPLUS
CN 3-Pyridinemethanol, 2-amino-6-[2-hydroxy-6-[(4-methylpentyl)oxy]phenyl]-4(4-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

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#### ● HCl

RN 406211-17-4 HCAPLUS
CN Phenol, 2-[6-amino-5-(phenoxymethyl)-4-(4-piperidinyl)-2-pyridinyl]-3(cyclopropylmethoxy)-, monohydrochloride (9CI) (CA INDEX NAME)

#### ● HCl

RN 406211-18-5 HCAPLUS
CN 2,5-Pyrrolidinedione, 1-[[2-amino-6-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-4-(4-piperidinyl)-3-pyridinyl]methoxy]-, monohydrochloride (9CI) (CA INDEX NAME)

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RN 406211-49-2 HCAPLUS

CN 1,8-Naphthyridine-3-carboxylic acid, 1,2-dihydro-7-(2-hydroxyphenyl)-2-oxo-5-(3-piperidinyl)-, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 406211-51-6 HCAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 7-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-1,2-dihydro-2-oxo-5-(4-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

المراجعة الم

$$H_2N-C$$
O
 $H_2N-C$ 
O

RN 406211-56-1 HCAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 7-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-1,2-dihydro-2-oxo-5-(3-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 406211-72-1 HCAPLUS

CN 1,8-Naphthyridine-3-carboxylic acid, 7-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-1,2-dihydro-2-oxo-5-(3-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

### The Page Dienk (uspic)

HCl

RN 406211-73-2 HCAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 7-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-1,2-dihydro-2-oxo-5-(3-piperidinyl)-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)

$$n-PrNH-C$$
OH
OH
OH

HCl

RN 406211-74-3 HCAPLUS

CN

1,8-Naphthyridine-3-carboxamide, 7-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-1,2-dihydro-N-(methylsulfonyl)-2-oxo-5-(3-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

### 11.00 7000 2.0018 (300.00)

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HCl

RN 406211-75-4 HCAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 7-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-1,2-dihydro-N-methyl-2-oxo-5-(3-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 406211-76-5 HCAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 7-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-1,2-dihydro-N,N-dimethyl-2-oxo-5-(3-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

Tis Pago Diank (1994a)

RN 406211-78-7 HCAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 7-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-1,2-dihydro-2-oxo-N-(phenylmethyl)-5-(3-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

#### ● HCl

RN 406211-79-8 HCAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 7-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-1,2-dihydro-N-(2-methoxyethyl)-2-oxo-5-(3-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\$$

RN 406211-82-3 HCAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 7-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-1,2-dihydro-N-(1-methylethyl)-2-oxo-5-(3-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$$

#### HCl

RN 406211-83-4 HCAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 7-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-N-[2-(dimethylamino)ethyl]-1,2-dihydro-2-oxo-5-(3-piperidinyl)-, dihydrochloride (9CI) (CA INDEX NAME)

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$$\begin{array}{c|c} & & & \\ & & & \\ & & \\ \text{Me}_2\text{N}-\text{CH}_2-\text{CH}_2-\text{NH}-\text{C} \\ & & \\ \text{O} \\ & & \\ \text{HN} \end{array}$$

RN 406211-84-5 HCAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 7-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-N-(2,3-dihydro-1H-inden-2-yl)-1,2-dihydro-2-oxo-5-(3-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

#### ● HCl

RN 406211-85-6 HCAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 7-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-N-(diphenylmethyl)-1,2-dihydro-2-oxo-5-(3-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

This Fage Diank (wasta)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

RN 406211-86-7 HCAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 7-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-1,2-dihydro-2-oxo-N-[(1S)-1-phenylethyl]-5-(3-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 406211-87-8 HCAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 7-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-1,2-dihydro-2-oxo-N-[(1R)-1-phenylethyl]-5-(3-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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RN 406211-89-0 HCAPLUS

CN L-Alanine, N-[[7-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-1,2-dihydro-2-oxo-5-(3-piperidinyl)-1,8-naphthyridin-3-yl]carbonyl]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 406211-90-3 HCAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 7-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-1,2-dihydro-2-oxo-N-(2-phenylethyl)-5-(3-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

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$$\begin{array}{c|c} & & & \\ & & & \\ & & \\ \text{Ph-CH}_2\text{-CH}_2\text{-NH-C} & & \\ & & \\ & & \\ \text{O} & & \\ & &$$

HCl

RN 406211-91-4 HCAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclohexyl-7-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-1,2-dihydro-2-oxo-5-(3-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 406211-92-5 HCAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-(cyclohexylmethyl)-7-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-1,2-dihydro-2-oxo-5-(3-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

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#### HC1

RN 406211-93-6 HCAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 7-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-1,2-dihydro-N-(2-hydroxyethyl)-2-oxo-5-(3-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & \\ \text{HO-CH}_2\text{-CH}_2\text{-NH-C} \\ & & \\$$

#### ● HCl

RN 406211-94-7 HCAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-7-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-1,2-dihydro-2-oxo-5-(3-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

This Fage Dank (uspic)

$$\begin{array}{c|c} & & & \\ & & & \\$$

RN 406211-96-9 HCAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclobutyl-7-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-1,2-dihydro-2-oxo-5-(3-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 406211-97-0 HCAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopentyl-7-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-1,2-dihydro-2-oxo-5-(3-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

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$$\begin{array}{c|c} & & & \\ &$$

HCl

RN 406211-98-1 HCAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cycloheptyl-7-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-1,2-dihydro-2-oxo-5-(3-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 406211-99-2 HCAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 7-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-N-(1-ethylpropyl)-1,2-dihydro-2-oxo-5-(3-piperidinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

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RN 406212-00-8 HCAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 7-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-1,2-dihydro-2-oxo-5-(3-piperidinyl)-N-(1-propylbutyl)-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 406212-01-9 HCAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 7-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-1,2-dihydro-2-oxo-5-(3-piperidinyl)-N-(2,2,2-trifluoroethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

$$F_3C-CH_2-NH-C$$
OH
OH

#### HCl

#### IT 406213-58-9 406213-65-8

RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of (hydroxyaryl)pyridines as inhibitors of I.kappa.B kinase
.beta. and as antiinflammatory, immunosuppressant, antitumor,
and antiischemic agents)

RN 406213-58-9 HCAPLUS

CN [3,4'-Bipyridine]-1,3'(2H)-dicarboxylic acid, 2'-amino-5,6-dihydro-6'-[2-[(4-methoxyphenyl)methoxy]phenyl]-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

RN 406213-65-8 HCAPLUS

CN 1,8-Naphthyridine-3-carboxylic acid, 7-[2-(cyclopropylmethoxy)-6-[(4-methoxyphenyl)methoxy]phenyl]-5-[1-[(1,1-dimethylethoxy)carbonyl]-3-piperidinyl]-1,2-dihydro-2-oxo-, ethyl ester (9CI) (CA INDEX NAME)

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IT 405239-73-8P 405239-74-9P 405239-75-0P 405239-76-1P 405282-54-4P 405282-57-7P 405282-60-2P 406212-71-3P 406212-73-5P 406212-78-0P 406212-79-1P 406212-80-4P 406212-81-5P 406212-83-7P 406212-85-9P 406212-86-0P 406212-87-1P 406212-88-2P 406212-89-3P 406212-90-6P 406212-99-5P 406213-05-6P 406213-32-9P 406213-33-0P 406213-34-1P 406213-50-1P 406213-51-2P 406213-52-3P 406213-53-4P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. of (hydroxyaryl)pyridines as inhibitors of I.kappa.B kinase .beta. and as antiinflammatory, immunosuppressant, antitumor, and antiischemic agents) RN 405239-73-8 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-amino-4-[1-[(1,1-dimethylethoxy)carbonyl]-3-piperidinyl]-6-[2-(phenylmethoxy)phenyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 405239-74-9 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-amino-6-[2-[(4-methoxyphenyl)methoxy]phenyl]-4-[1-[(phenylmethoxy)carbonyl]-3-piperidinyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

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RN 405239-75-0 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-amino-6-[2-(cyclopropylmethoxy)-6-[(4-methoxyphenyl)methoxy]phenyl]-4-[1-[(1,1-dimethylethoxy)carbonyl]-3-piperidinyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 405239-76-1 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-amino-4-[1-[[(1,1-dimethylethoxy)carbonyl]amino]-2-phenylethyl]-6-[2-(phenylmethoxy)phenyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 405282-54-4 HCAPLUS

CN 1-Piperidinecarboxylic acid, 3-[2-amino-3-(hydroxymethyl)-6-[2-(phenylmethoxy)phenyl]-4-pyridinyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

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RN 405282-57-7 HCAPLUS

CN 1,8-Naphthyridine-3-carboxylic acid, 5-[1-[(1,1-dimethylethoxy)carbonyl]-3-piperidinyl]-1,2-dihydro-7-(2-hydroxyphenyl)-2-oxo-, ethyl ester (9CI) (CA INDEX NAME)

RN 405282-60-2 HCAPLUS

CN 1-Piperidinecarboxylic acid, 4-[6-(aminocarbonyl)-2-[2-(cyclopropylmethoxy)-6-[(4-methoxyphenyl)methoxy]phenyl]-1,7-dihydro-7-oxo-1,8-naphthyridin-4-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{MeO} & & \text{CH}_2-\text{O} \\ & & \text{CH}_2-\text{O} \\ & & \text{N} & & \text{O} \\ & & & \text{C}-\text{OBu-t} \\ & & & \text{O} \end{array}$$

RN 406212-71-3 HCAPLUS

CN 1-Piperidinecarboxylic acid, 3-[2-amino-3-(aminocarbonyl)-6-[2-

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(phenylmethoxy)phenyl]-4-pyridinyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

$$H_2N-C$$

RN 406212-73-5 HCAPLUS

CN 1-Piperidinecarboxylic acid, 3-[2-amino-3-(aminocarbonyl)-6-(2-hydroxyphenyl)-4-pyridinyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

$$H_2N-C$$

RN 406212-78-0 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-amino-6-(2-hydroxyphenyl)-4-[1-[(phenylmethoxy)carbonyl]-3-piperidinyl]- (9CI) (CA INDEX NAME) This Page Diank (uspic)

RN 406212-79-1 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-amino-6-(2-hydroxyphenyl)-4-[1[(phenylmethoxy)carbonyl]-3-piperidinyl]-, methyl ester (9CI) (CA INDEX NAME)

RN 406212-80-4 HCAPLUS

CN 1-Piperidinecarboxylic acid, 3-[2-amino-6-(2-hydroxyphenyl)-3[(methylamino)carbonyl]-4-pyridinyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ \text{MeNH}-C & & & \\ & & & \\ \text{Ph}-CH_2-O-C & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & \\ & & & \\ &$$

RN 406212-81-5 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-amino-4-[1-[(1,1-dimethylethoxy)carbonyl]-3-piperidinyl]-6-(2-hydroxyphenyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

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RN 406212-83-7 HCAPLUS

CN 1-Piperidinecarboxylic acid, 3-[2-amino-3-[(methylamino)carbonyl]-6-[2-(phenylmethoxy)phenyl]-4-pyridinyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 406212-85-9 HCAPLUS

CN 1-Piperidinecarboxylic acid, 3-[2-amino-3-(hydroxymethyl)-6-(2-hydroxyphenyl)-4-pyridinyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 406212-86-0 HCAPLUS

CN [3,4'-Bipyridine]-1(2H)-carboxylic acid, 2'-amino-5,6-dihydro-3'-(hydroxymethyl)-6'-[2-[(4-methoxyphenyl)methoxy]phenyl]-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

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RN 406212-87-1 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-amino-6-[2,6-bis(phenylmethoxy)phenyl]-4-[1-[(1,1-dimethylethoxy)carbonyl]-3-piperidinyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 406212-88-2 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-amino-6-(2,6-dihydroxyphenyl)-4-[1-[(1,1-dimethylethoxy)carbonyl]-3-piperidinyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 406212-89-3 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-amino-6-[2-(cyclopropylmethoxy)-6-hydroxyphenyl]-4-[1-[(1,1-dimethylethoxy)carbonyl]-3-piperidinyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

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RN 406212-90-6 HCAPLUS

CN 1-Piperidinecarboxylic acid, 3-[2-amino-6-(2-hydroxyphenyl)-3-(methoxymethyl)-4-pyridinyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 406212-99-5 HCAPLUS

CN 1-Piperidinecarboxylic acid, 3-[2-amino-6-[2-(cyclopropylmethoxy)-6-[(4-methoxyphenyl)methoxy]phenyl]-3-(hydroxymethyl)-4-pyridinyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & \\ & & \\ \text{CH}_2 - \text{O} & & \\ & & \\ \text{O} & & \\$$

RN 406213-05-6 HCAPLUS

CN Carbamic acid, [1-[2-amino-3-(hydroxymethyl)-6-[2-(phenylmethoxy)phenyl]-4-pyridinyl]-2-phenylethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Tato Page Blonk (uspic)

RN 406213-32-9 HCAPLUS

CN 1,8-Naphthyridine-3-carboxylic acid, 7-[2-(cyclopropylmethoxy)-6-[(4-methoxyphenyl)methoxy]phenyl]-5-[1-[(1,1-dimethylethoxy)carbonyl]-3-piperidinyl]-1,2-dihydro-2-oxo- (9CI) (CA INDEX NAME)

$$CH_2-O$$
 $CH_2-O$ 
 $CH_2-O$ 
 $CH_2$ 
 $CH_2$ 

RN 406213-33-0 HCAPLUS

CN 1-Piperidinecarboxylic acid, 3-[2-[2-(cyclopropylmethoxy)-6-[(4-methoxyphenyl)methoxy]phenyl]-1,7-dihydro-7-oxo-6-[(propylamino)carbonyl]-1,8-naphthyridin-4-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

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RN 406213-34-1 HCAPLUS

CN 1-Piperidinecarboxylic acid, 3-[2-[2-(cyclopropylmethoxy)-6-[(4-methoxyphenyl)methoxy]phenyl]-1,7-dihydro-6-[[(methylsulfonyl)amino]carbonyl]-7-oxo-1,8-naphthyridin-4-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 406213-50-1 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-amino-6-[2-(cyclopropylmethoxy)-6-[(4-methoxyphenyl)methoxy]phenyl]-4-(methylthio)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

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$$\begin{array}{c|c} CH_2-O & OMe \\ \hline \\ N\\ NH_2 \\ C-OBu-t \\ \hline \\ O \end{array}$$

RN 406213-51-2 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-amino-6-[2-(cyclopropylmethoxy)-6-[(4-methoxyphenyl)methoxy]phenyl]-4-(methylsulfinyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} CH_2-O & O-CH_2 \\ \hline \\ Me-S & NH_2 \\ \hline \\ O & C-OBu-t \\ \hline \\ O & O-CH_2 \\ \hline \end{array}$$

RN 406213-52-3 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-amino-6-[2-(cyclopropylmethoxy)-6-[(4-methoxyphenyl)methoxy]phenyl]-4-[[2-[[(1,1-dimethylethoxy)carbonyl]amino]ethyl]amino]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 406213-53-4 HCAPLUS

CN Carbamic acid, [2-[[2-amino-6-[2-(cyclopropylmethoxy)-6-[(4-methoxyphenyl)methoxy]phenyl]-3-(hydroxymethyl)-4-pyridinyl]amino]ethyl]-,

T.13 Pago Blank (uspio)

## 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

## RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L28 ANSWER 2 OF 54 HCAPLUS COPYRIGHT 2002 ACS
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AN 2002:240561 HCAPLUS

DN 136:257242

TI Statins (HMG-CoA reductase inhibitors) as a novel type of immunomodulator, immunosuppressor and anti-inflammatory agent

IN Mach, Francois

PA Novimmune S.A., Switz.

SO PCT Int. Appl., 82 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

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PATENT NO.
                       KIND DATE
                                              APPLICATION NO.
                                                                 DATE
                              20020328
PΙ
     WO 2002024194
                       A2
                                              WO 2001-EP11485 20010919
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
              LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT,
              RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
              UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
              DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
              BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
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PRAI US 2000-664871 A 20000919

AB The present invention relates to methods of causing MHC-class II or CD40 mediated immunomodulation, immunosuppression and anti-inflammatory action, in a subject suffering from or susceptible of suffering from a condition involving inappropriate immune response, which comprises administering to the subject at least one statin, or a functionally or structurally equiv. mol., in an amt. effective to modulate MHC class II or CD40 expression in the subject. The present invention provides a new class of agents that reduce or repress T-lymphocyte activation mediated by class II or CD40 expression and consequently are capable of acting as immunomodulators and antiinflammatory agents.

IT 145599-86-6, Cerivastatin

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

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(statins (HMG-CoA reductase inhibitors) as **immunosuppressor** and antiinflammatory agents that modulate MHC-class II or CD40 expression inducible by interferon .gamma. and T-lymphocyte activation) 145599-86-6 HCAPLUS

CN 6-Heptenoic acid, 7-[4-(4-fluorophenyl)-5-(methoxymethyl)-2,6-bis(1-methylethyl)-3-pyridinyl]-3,5-dihydroxy-, (3R,5S,6E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+). Double bond geometry as shown.

L28 ANSWER 3 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 2002:89809 HCAPLUS

DN 136:139844

RN

TI Compositions useful for regulating hair growth containing metal complexes of oxidized carbohydrates

IN Gardlik, John Michael; Severynse-Stevens, Diana; Comstock, Bryan Gabriel

PA The Procter & Gamble Company, USA

SO PCT Int. Appl., 47 pp. CODEN: PIXXD2

Patent

LA English

FAN.CNT 1

DT

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PATENT NO.
                                KIND
                                         DATE
                                                                APPLICATION NO.
                                                                                        DATE
                                ----
                                         _____
                                                                -----
       WO 2002007700
                                 A2
                                         20020131
ΡI
                                                               WO 2001-US23425 20010725
                 AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ,
                   TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
                   MD, RU, TJ, TM
             RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
                   DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
                   BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI US 2000-220756P
                                         20000726
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AB A stable cosmetic, dermatol., or pharmaceutical compn. comprising: (a) about 0.001-99.9%, by wt., of at least one metal complex of an oxidized carbohydrate, wherein the metal complex of an oxidized carbohydrate is neither zinc gluconate, manganese gluconate, nor lithium gluconate; and (b) about 0.1-99.999%, by wt., of a vehicle, wherein the vehicle comprises at least about 5%, by wt. of the compn., of propylene glycol. The compn. is administered orally, parenterally or topically. For example, a topical

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compn. was prepd. contg. zinc lactobionate 5.0%, zinc gluconate 3.0%, minoxidil 2.5%, propylene glycol 8.0%, dimethylisosorbide 19.0%, and ethanol and minors up to 100%.

IT 59-67-6, Nicotinic acid, biological studies 98-92-0,

Niacinamide 118292-40-3, Tazarotene

RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(compns. contg. metal complexes of oxidized carbohydrates for regulating hair growth)

RN 59-67-6 HCAPLUS

CN 3-Pyridinecarboxylic acid (9CI) (CA INDEX NAME)

RN 98-92-0 HCAPLUS

CN 3-Pyridinecarboxamide (9CI) (CA INDEX NAME)

RN 118292-40-3 HCAPLUS

CN 3-Pyridinecarboxylic acid, 6-[(3,4-dihydro-4,4-dimethyl-2H-1-benzothiopyran-6-yl)ethynyl]-, ethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & \\ Eto-C & & \\ & & \\ & & \\ & & \\ & & \\ \end{array}$$

L28 ANSWER 4 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 2002:89795 HCAPLUS

DN 136:139843

TI Method of regulating hair growth using metal complexes of oxidized carbohydrates

IN Gardlik, John Michael; Severynse-Stevens, Diana; Comstock, Bryan Gabriel

PA The Procter & Gamble Company, USA

SO PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DT Patent

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LA English FAN.CNT 1
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PATENT NO.
                       KIND DATE
                                               APPLICATION NO. DATE
     WO 2002007685 A2 20020131 WO 2001-US23424 20010725
PΤ
          W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
              CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES,
              FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,
              KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
              MD, RU, TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
              DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
              BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                       A1
                                          US 2001-909441 20010719
     US 2002035070
                               20020321
PRAI US 2000-220755P
                        P
                               20000726
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AB A method for regulating the growth of hair comprising administering to a mammal, an effective amt. of a compn. comprising: (a) about 0.001-99.9%, by wt., of at least one metal complex of an oxidized carbohydrate, wherein the metal complex of an oxidized carbohydrate is neither zinc gluconate nor manganese gluconate; and (b) about 0.1-99.999%, by wt., of a vehicle. The compn. is administered orally, parenterally, or topically. For example, a topical compn. contained zinc lactobionate 5.0%, zinc gluconate 1.0%, zinc pyrithione 1.0%, Tween 20 1.0%, propylene glycol 10.0%, dimethylisosorbide 18.0%, EtOH 30.0%, and water and minors up to 100%. Also, tablets were prepd. contg. zinc lactobionate 100 mg, Crospovidone 15 mg, lactose 200 mg, microcryst. cellulose 80 mg, and magnesium stearate 5 mg.

IT 59-67-6, Nicotinic acid, biological studies 98-92-0, Niacinamide 118292-40-3, Tazarotene

RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(compns. contg. metal complexes of oxidized carbohydrates for regulating hair growth)

RN 59-67-6 HCAPLUS

CN 3-Pyridinecarboxylic acid (9CI) (CA INDEX NAME)

RN 98-92-0 HCAPLUS

CN 3-Pyridinecarboxamide (9CI) (CA INDEX NAME)

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RN 118292-40-3 HCAPLUS

CN 3-Pyridinecarboxylic acid, 6-[(3,4-dihydro-4,4-dimethyl-2H-1-benzothiopyran-6-yl)ethynyl]-, ethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & \\ Eto-c & \\ & & \\ & & \\ & & \\ \end{array}$$

L28 ANSWER 5 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 2002:10480 HCAPLUS

DN 136:85818

TI Preparation of pyrrolo[2,3-d]pyrimidines as immunosuppressive agents

IN Blumenkopf, Todd Andrew; Flanagan, Mark Edward; Munchhof, Michael John

PA Pfizer Products Inc., USA

SO PCT Int. Appl., 86 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.				KIND		DATE			APPLICATION NO.					DATE					
ΡI	WO	2002000661			A1		20020103			WO 2001-IB975				20010605						
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,		
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,		
			GM,	HR,	ΗU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,		
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NO,	NΖ,	PL,	PT,		
			RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,		
			UZ,	VN,	YU,	ZA,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM				
		RW:	GH,	GM,	ΚE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	ΒE,	CH,	CY,		
			DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	TR,	BF,		
			ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG				
	US	S 2002068746		A1		20020606			U	US 2001-891028 20010625										
PRAI	US	2000	2000-214287P		P		2000	0626												
OS	MARPAT 136:85818			3																
GT																				

$$\mathbb{R}^1$$
  $\mathbb{R}^2$   $\mathbb{R}^3$   $\mathbb{R}^3$   $\mathbb{R}^3$ 

II

lilo Tago Siank (uspio)

- AB The title compds. [I; R1 = NR4(CH2)yR5 (wherein y = 0-2; R4 = H, alkyl, alkylsulfonyl, etc.; R5 = substituted heterocycloalkyl); R2, R3 = H, NH2, halo, etc.], useful as inhibitors of protein kinases, such as the enzyme Janus Kinase 3 (no data given), were prepd., e.g., a multi-step synthesis of II was given.
- IT 384335-77-7P 384335-78-8P 384336-84-9P 384336-87-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of pyrrolo[2,3-d]pyrimidines as **immunosuppressive** agents)

- RN 384335-77-7 HCAPLUS
- CN 3-Pyridinecarboxylic acid, 6-[4-methyl-3-(methyl-1H-pyrrolo[2,3-d]pyrimidin-4-ylamino)-1-piperidinyl]-, methyl ester (9CI) (CA INDEX NAME)

- RN 384335-78-8 HCAPLUS
- CN 3-Pyridinemethanol, 6-[4-methyl-3-(methyl-1H-pyrrolo[2,3-d]pyrimidin-4-ylamino)-1-piperidinyl]- (9CI) (CA INDEX NAME)

Me 
$$N-Me$$
  $N+Me$   $N+Me$ 

- RN 384336-84-9 HCAPLUS
- CN 3-Pyridinecarboxamide, N-methyl-6-[4-methyl-3-(methyl-1H-pyrrolo[2,3-d]pyrimidin-4-ylamino)-1-piperidinyl]- (9CI) (CA INDEX NAME)

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RN 384336-87-2 HCAPLUS

CN 3-Pyridinecarboxamide, 6-[4-methyl-3-(methyl-1H-pyrrolo[2,3-d]pyrimidin-4-ylamino)-1-piperidinyl]- (9CI) (CA INDEX NAME)

## RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 6 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:791912 HCAPLUS

DN 135:344503

TI Preparation of imidazopyrimidines and triazolopyrimidines as inhibitors of Syk tyrosine kinase

IN Yura, Takeshi; Conception, Arnel B.; Hahn, Kyun Hee; Hiraoka, Makiko; Katsumada, Hiroko; Kawamura, Norihiro; Kokubo, Toshio; Komura, Hiroshi; Lee, Young Ho; Lowinger, Timothy B.; Motegi, Munehito; Yamamoto, Tomoyuki; Yoshida, Osahiro

PA Bayer A.-G., Germany

SO Jpn. Kokai Tokkyo Koho, 212 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PA	PATENT NO.				ND	DATE			Α	PPLI	CATI	N NC	0.	DATE					
		JP 2001302667 WO 2001083485					<del>-</del>			_		<del>-</del>								
ΡI	JP				A	2	2001	1031		J	P 20	00-1	2887	0	20000428					
	WO				Α	1	20011108			WO 2001-EP4357					20010417					
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,		
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,		
			HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,		
			LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	ΝZ,	PL,	PT,	RO,		
			RU,	SD,	SE															
		RW:	GH.	GM.	KE.	LS.	MW.	MZ.	SD.	SL.	SZ.	TZ.	UG.	ZW,	AT,	BE,	CH,	CY,		

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DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRAI JP 2000-128870 A 20000428
OS MARPAT 135:344503
GI

$$\begin{array}{c|cccc}
R^1 \\
N \\
R^2 \\
N \\
R^3 \\
I
\end{array}$$

The title compds. [I; R1 = X-R4, (un)substituted 4- to 5-membered AΒ (un) satd. heterocyclyl contg. .ltoreq.4 heteroatoms selected from O, N, and S, 4 to 7-membered (un)satd. carbocyclyl, 7 to 10-membered (un)satd. condensed ring moiety optionally contg. .ltoreq.4 heteroatoms selected from O, N, and S [wherein X = (un) substituted CH2, O, S, SO, SO2, (un) substituted NH; R4 = (un) substituted C7-10 aroyl, C7-10 aralkyl, C1-10 alkyl, C2-10 alkenyl, C3-7 (un)satd. carbocyclyl, 4 to 7-membered (un) satd. heterocyclyl contq. .ltoreq.4 heteroatoms selected from O, N, and S, 7 to 10-membered (un)satd. condensed ring moiety optionally contg. .ltoreq.4 heteroatoms selected from O, N, and S]; Y = CH, N; R2 = H, (un)substituted C1-10 alkyl, NR8COR9, NR8CO2R9, COR8, CO2R9, CONR8R9 [wherein R8, R9 = H, (un) substituted C1-6 alkyl]; R3 = (un) substituted aryl or heteroaryl] or salts thereof are prepd. These compds. are useful as antiallergic agent for the prevention or treatment of asthma, allergic rhinitis, atopic dermatitis, food allergy, contact allergy, hives, conjunctivitis, and vernal (spring) catarrh, or as immunosuppressants, anticoagulants, or antitumor agents. Thus, 5-chloro-7-(3,4dimethoxyphenyl)imidazo[1,2-c]pyrimidine, 1-(4-fluorophenyl)piperazine dihydrochloride, diisopropylethylamine, and 2-propanol were heated at 90.degree. with stirring to give 64.6% 7-(3,4-dimethoxyphenyl)-5-[4-(4fluorophenyl)piperazin-1-yl]imidazo[1,2-c]pyrimidine which showed IC50 of .ltoreq.0.5 .mu.M against Syk tyrosine kinase.

IT 371169-84-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of imidazopyrimidines and triazolopyrimidines as inhibitors of Syk tyrosine kinase, immunosuppressants, anticoagulants, antitumor agents, or antiallergic agents)

RN 371169-84-5 HCAPLUS

CN 3-Pyridinecarboxylic acid, 4-[[7-(3,4-dimethoxyphenyl)imidazo[1,2-c]pyrimidin-5-yl]thio]- (9CI) (CA INDEX NAME)

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L28 ANSWER 7 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:608625 HCAPLUS

DN 135:352607

TI Short-term effects of statin therapy in patients with hyperlipoproteinemia after liver transplantation: results of a randomized cross-over trial

AU Zachoval, R.; Gerbes, A. L.; Schwandt, P.; Parhofer, Klaus G.

CS Medical Department II, Ludwig-Maximilians-University, Munich, 81377,

SO Journal of Hepatology (2001), 35(1), 86-91 CODEN: JOHEEC; ISSN: 0168-8278

PB Elsevier Science Ltd.

DT Journal

LA English

ΙT

Background/Aims: Hyperlipoproteinemia is frequent following liver AΒ transplantation and may lead to atherosclerosis. Lipid-lowering agents may be useful, but could interfere with the function of the transplanted organ and with immunosuppression. The authors therefore evaluated in a prospective, randomized, open-labeled cross-over trial the effect of two frequently used 3-hydroxy-3-methylglutaryl CoA reductase inhibitors (pravastatin 10 mg d-1 and cerivastatin 0.1 mg d-1) in hyperlipoproteinemic patients after liver transplantation. Methods: Sixteen patients (6.3.+-.2.0 yr post-transplantation, cyclosporine n = 11,tacrolimus n = 5) with hyperlipoproteinemia (cholesterol 246.+-.42, triglycerides 191.+-.87, low-d. lipoprotein (LDL)-cholesterol 161.+-.35, high-d. lipoprotein (HDL)-cholesterol 44.+-.11 mg dl-1) were included. Treatment periods of 6 wk were sepd. by a 4-wk washout period. Results: Both medications were tolerated well, no effects on serum concns. of liver enzymes or immunosuppressive agents were obsd. Cerivastatin and pravastatin decreased (P < 0.001) cholesterol by 21.+-.10% and 15.+-.10%, LDL-cholesterol by 27.+-.14% and 17.+-.15%, resp., while triglyceride and HDL-cholesterol concns. did not change significantly. LDL/HDL-cholesterol markedly improved (P < 0.001) by 29.+-.16% (cerivastatin) and 16.+-.16%(pravastatin). Cerivastatin was more potent than pravastatin in patients receiving cyclosporine A, while there was no significant difference in patients receiving tacrolimus. Conclusions: Low-dose cerivastatin and pravastatin significantly improve lipid profiles following liver transplantation without affecting liver function or immunosuppression.

145599-86-6, Cerivastatin
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU

This Page Diank (uspic)

(Therapeutic use); BIOL (Biological study); USES (Uses) (short-term effects of statins in humans with hyperlipoproteinemia receiving immunosuppressive therapy after liver transplantation)

RN 145599-86-6 HCAPLUS

CN 6-Heptenoic acid, 7-[4-(4-fluorophenyl)-5-(methoxymethyl)-2,6-bis(1-methylethyl)-3-pyridinyl]-3,5-dihydroxy-, (3R,5S,6E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+). Double bond geometry as shown.

$$i-Pr$$
 $E$ 
 $S$ 
 $R$ 
 $CO_2H$ 
 $i-Pr$ 
 $OH$ 
 $OH$ 

RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 8 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:589091 HCAPLUS

DN 136:350274

TI Antagonism by nicotinamide of the immune suppression induced by UV

AU Wang, Jiajun; Xie, Ni; Liu, Yan; Sun, Wei; Li, Jing; Liu, Yang; Wang, Bingxian; Yu, Jiaming

CS Department of Environmental Health, Shenyang Medical College, Shenyang, 110031, Peop. Rep. China

SO Zhongguo Gonggong Weisheng (2001), 17(6), 503-505 CODEN: ZGWEE3; ISSN: 1001-0580

PB Zhongguo Gonggong Weisheng Zazhishe

DT Journal

LA Chinese

AB Nicotinamide antagonized the immunosuppression induced in mice by UV.

IT 98-92-0, Nicotinamide

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antagonism by nicotinamide of the immune suppression induced by UV)

RN 98-92-0 HCAPLUS

CN 3-Pyridinecarboxamide (9CI) (CA INDEX NAME)

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L28
    ANSWER 9 OF 54 HCAPLUS COPYRIGHT 2002 ACS
AN
     2001:525887 HCAPLUS
DN
     135:127191
ΤI
     Pharmaceutical and cosmetic carrier or composition for topical application
     containing a fatty acid, a fatty alcohol and an oil
     Eini, Meir; Tamarkin, Dov
IN
     Thixo Ltd., Israel
PA
     PCT Int. Appl., 76 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 2
     PATENT NO.
                  KIND DATE
                                          APPLICATION NO. DATE
                                        . -----
                           -----
                     A1 20010719 WO 2001-IL25 20010110
PΙ
     WO 2001051014
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                           20020219
                                         US 2000-526509
     US 6348229
                      В1
PRAI IL 2000-133968
                           20000110
                      Α
     IL 2000-133969
                      Α
                           20000110
     US 2000-526509
                           20000316
                      Α
     IL 2000-137051
                      Α
                           20000627
     IL 2000-137052
                      Α
                           20000627
     US 2000-216162P P
                           20000703
                     Α
     US 2000-653267
                           20000831
AΒ
     A pharmaceutical or cosmetic carrier or compn. for topical application,
     characterized by rheol. properties which render the carrier or compn.
     semi-solid at rest and a liq. upon application of shear forces, is
     described. The compn. or carrier are prepd. by mixing (by wt.) 1-25% of a
     solidifying agent, such as a long-chain fatty alc. and a fatty acid, and
     75-99% of a hydrophobic solvent, such as an animal, mineral, silicone, or
     plant-derived oil, wherein at least one of them has therapeutic or
     cosmetic benefits, in the presence or absence of a biol. active substance.
     For example, behenic acid (10 g) was heated to 80.degree. and mixed with
     light paraffin oil (90 g) preheated to the same temp. Then glycerin (10
     g), tristearin (10 g), and an antioxidant mixt. (1 g) were added by
     agitation. Bifunazole (1.2 g) and diflucortolone valerate (0.12 g) were
     added and the mixt. was poured into containers (5 g tubes) and was allowed
     to cool spontaneously. While the mixt. cooled to ambient temp. it
    gradually turned into a semisolid, i.e., an ointment contg. the antifungal
    agent.
    98-92-0, vitamin B3
IT
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (topical compns. contg. fatty acid, fatty alc. and oil for
       pharmaceutical and cosmetic uses)
RN
    98-92-0 HCAPLUS
CN
    3-Pyridinecarboxamide (9CI) (CA INDEX NAME)
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### RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 10 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:279856 HCAPLUS

DN 135:58497

TI Immunosuppressive Sesquiterpene Alkaloids from Tripterygium wilfordii

AU Duan, Hongquan; Takaishi, Yoshihisa; Momota, Hiroshi; Ohmoto, Yasukazu; Taki, Takao; Jia, Yongfeng; Li, Duan

CS Faculty of Pharmaceutical Sciences, University of Tokushima, Tokushima, 770-8505, Japan

SO Journal of Natural Products (2001), 64(5), 582-587 CODEN: JNPRDF; ISSN: 0163-3864

I

PB American Chemical Society

DT Journal

LA English

GI

AB Nine new sesquiterpene pyridine alkaloids [wilfornines A (I), B, C, D, E, F, and G; wilfordinines I and J] and six known compds. (ebenifoline E-11, hyponine D, mayteine, euonymine, congorinine E-1, and triptonine A) were isolated from a clin. used ext. (TII) of Tripterygium wilfordii. The structures of the new alkaloids were elucidated by spectroscopic and chem. methods. The inhibitory effects on cytokine prodn. of wilfornines A, B, and C and several related compds. were evaluated. Ebenifoline E-11 and congorinine E-1 showed significant inhibitory effects on cytokine prodn.

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#### IT 345954-06-5P

RN 345954-06-5 HCAPLUS
CN 3-Pyridinecarboxylic acid, (8R,9R,10R,11S,12R,13R,14R,15S,20S,21S,22R)10,13,14,21-tetrakis(acetyloxy)-12-[(acetyloxy)methyl]5,7,8,9,10,12,13,14,15,17,18,19-dodecahydro-20-hydroxy-8,18,19,20tetramethyl-5,17-dioxo-8,11-epoxy-9,12-ethano-11,15-methano-11H[1,8]dioxacycloheptadecino[4,3-b]pyridin-22-yl ester (9CI) (CA INDEX NAME)

#### IT **259823-31-9**, Hyponine D

RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)

(immunosuppressive sesquiterpene alkaloids from Tripterygium wilfordii)

RN 259823-31-9 HCAPLUS

CN

3-Pyridinecarboxylic acid, (8R, 9R, 10R, 11S, 12R, 13R, 14R, 15S, 20S, 21S, 22R) - 13,21,22-tris(acetyloxy)-12-[(acetyloxy)methyl]-10-(benzoyloxy)-5,7,8,9,10,12,13,14,15,17,18,19-dodecahydro-20-hydroxy-8,18,19,20-tetramethyl-5,17-dioxo-8,11-epoxy-9,12-ethano-11,15-methano-11H-[1,8]dioxacycloheptadecino[4,3-b]pyridin-14-yl ester (9CI) (CA INDEX NAME)

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PAGE 2-A

## RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 11 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 2000:706352 HCAPLUS

DN 133:276324

TI Inhibitors of cellular nicotinamide mononucleotide formation, therapeutic

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use thereof, and identification and metabolic methods

IN Biedermann, Elfi; Eisenburger, Rolf; Hasmann, Max; Loser, Roland; Rattel, Benno; Reiter, Friedemann; Schein, Barbara; Schemainda, Isabel; Schulz, Michael; Seibel, Klaus; Vogt, Klaus; Wosikowski, Katja

PA Klinge Pharma G.m.b.H., Germany

SO Ger. Offen., 20 pp. CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI DE 19908483 A1 20001005 DE 1999-19908483 19990226

AB Biol. active substances are described which inhibit the cellular formation of NMN, an essential intermediate in NAD(P) biosynthesis in the cell. These substances can be used for a pharmaceutical compn. for the treatment of cancer, leukemia, or for Immunosuppression. Addnl., methods are described for the identification of such substances and for the investigation of a given cell type for its dependence on nicotinamide as a precursor in NAD synthesis.

IT 53-59-8, NADP 53-84-9, NAD

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU (Occurrence)

(NMN formation inhibitors, therapeutic use thereof, and identification and metabolic methods)

RN 53-59-8 HCAPLUS

CN Adenosine 5'-(trihydrogen diphosphate), 2'-(dihydrogen phosphate), P'.fwdarw.5'-ester with 3-(aminocarbonyl)-1-.beta.-D-ribofuranosylpyridinium, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

\_NH2

RN 53-84-9 HCAPLUS

## This raige Diank (uspio)

CN Adenosine 5'-(trihydrogen diphosphate), P'.fwdarw.5'-ester with 3-(aminocarbonyl)-1-.beta.-D-ribofuranosylpyridinium, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 98-92-0, Nicotinamide

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(NMN formation inhibitors, therapeutic use thereof, and identification and metabolic methods)

RN 98-92-0 HCAPLUS

CN 3-Pyridinecarboxamide (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{N} \\ \text{C-NH}_2 \\ \text{O} \end{array}$$

IT 10119-18-3, 3-Pyridinecarboxamide-14C

RL: BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)

(NMN formation inhibitors, therapeutic use thereof, and identification and metabolic methods)

RN 10119-18-3 HCAPLUS

CN 3-Pyridinecarboxamide-14C (9CI) (CA INDEX NAME)

IT 1094-61-7, Nicotinamide mononucleotide
RL: BPR (Biological process); BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation,

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09/693,558 July 3, 2002

nonpreparative); PROC (Process)

(NMN formation inhibitors, therapeutic use thereof, and identification and metabolic methods)

RN 1094-61-7 HCAPLUS

CN Pyridinium, 3-(aminocarbonyl)-1-(5-O-phosphono-.beta.-D-ribofuranosyl)-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 12 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 2000:475645 HCAPLUS

DN 133:104969

TI Preparation of 2-oxoquinoline compounds used as immunosuppressive, anti-inflammatory, and anti-allergic agents

IN Inaba, Takashi; Kaya, Tetsudo; Iwamura, Hiroyuki

PA Japan Tobacco Inc., Japan

SO PCT Int. Appl., 116 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

KIND DATE APPLICATION NO. DATE PATENT NO. \_\_\_\_\_ A1 20000713 WO 2000040562 WO 1999-JP7398 19991228 PΙ W: AU, BR, CA, CN, ID, IN, KR, NZ, US, VN RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE 20000919 JP 1999-368621 19991227 JP 2000256323 A2 EP 1142877 Α1 20011010 EP 1999-961472 19991228 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI 19990108 PRAI JP 1999-3498 Α WO 1999-JP7398 19991228 W MARPAT 133:104969 OS

GΙ

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$$R^3$$
 $R^2$ 
 $R^3$ 
 $R^3$ 

AB Title compds. [I; R = H, CH3; X = COOCH3, 4-FC6H4(CH2)2NHCO, 4-FC6H4(CH2)2NHCONHCH2, 4-FC6H4(CH2)2NHCOOCH2, 4-HOC6H4CH2CONHCH2, COOH, CH2OH, (CH3)2NCH2, NH2CH2, 4-NH2C6H4CH2NHCO, 4-NH2C6H4(CH2)2NHCO; R1 = H, OH, CH3(CH2)nO, HOOC(CH2)4O, HO(CH2)5O, CH3CO(CH2)3O; R2 = CH3O, OH, CH3(CH2)4O; R3 = H, CH3(CH2)nO; n = 1, 2, 3, 4; etc] and medicinally acceptable salts are prepd. and are acting selectively on cannabinoid receptors, particularly peripheral ones, have little adverse effects on the CNS, and exhibit excellent immunosuppressive, anti-inflammatory and antiallergic activities. These compds. are useful as regulators against cannabinoid receptors (particularly peripheral cannabinoid receptors), and serve as immunosuppressive, anti-inflammatory and antiallergic agents. Thus, the title compd. II was prepd. and tested.

IT 219607-40-6P 282089-53-6P 283178-57-4P 283178-59-6P 283178-60-9P 283178-62-1P 283178-63-2P 283178-66-5P 283178-67-6P 283178-75-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of oxoquinoline compds. used as **immunosuppressive**, anti-inflammatory, and anti-allergic agents)

RN 219607-40-6 HCAPLUS

CN 3-Quinolinecarboxamide, 1,2-dihydro-7-methoxy-2-oxo-8-(pentyloxy)-N-[2-(4-pyridinyl)ethyl]- (9CI) (CA INDEX NAME)

RN 282089-53-6 HCAPLUS

CN Carbamic acid, 4-pyridinyl-, (8-ethoxy-1,2-dihydro-7-methoxy-2-oxo-3-quinolinyl)methyl ester (9CI) (CA INDEX NAME)

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RN 283178-57-4 HCAPLUS

CN 3-Quinolinecarboxamide, 8-ethoxy-1,2-dihydro-7-methoxy-2-oxo-N-[2-(4-pyridinyl)ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{MeO} & \begin{array}{c} \text{H} \\ \text{N} \end{array} \\ \begin{array}{c} \text{C-NH-CH}_2\text{-CH}_2 \end{array} \\ \\ \text{O} \end{array}$$

RN 283178-59-6 HCAPLUS

CN 3-Quinolinecarboxamide, 1,2-dihydro-7-methoxy-2-oxo-8-(pentyloxy)-N-(4-pyridinylmethyl)- (9CI) (CA INDEX NAME)

RN 283178-60-9 HCAPLUS

CN 3-Quinolinecarboxamide, 1,2-dihydro-7-methoxy-2-oxo-8-(pentyloxy)-N-[2-(1-piperidinyl)ethyl]- (9CI) (CA INDEX NAME)

RN 283178-62-1 HCAPLUS

CN 3-Quinolinecarboxamide, 1,2-dihydro-7-methoxy-2-oxo-8-(pentyloxy)-N-(3-pyridinylmethyl)- (9CI) (CA INDEX NAME)

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RN 283178-63-2 HCAPLUS

CN 3-Quinolinecarboxamide, 1,2-dihydro-7-methoxy-2-oxo-8-(pentyloxy)-N-(2-pyridinylmethyl)- (9CI) (CA INDEX NAME)

RN 283178-66-5 HCAPLUS

CN 3-Quinolinecarboxamide, 8-butoxy-1,2-dihydro-7-methoxy-2-oxo-N-[2-(4-pyridinyl)ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{OBu-n} & \text{H} & \text{O} \\ \text{H} & \text{O} & \text{C-NH-CH}_2\text{-CH}_2 \\ \text{O} & \text{O} \end{array}$$

RN 283178-67-6 HCAPLUS

CN 3-Quinolinecarboxamide, 8-butoxy-1,2-dihydro-7-methoxy-2-oxo-N-[2-(4-pyridinyl)ethyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{OBu-n} & \text{H} & \text{O} \\ \hline & \text{H} & \text{O} \\ \hline & \text{C-NH-CH}_2\text{-CH}_2 \\ \hline & \text{O} \\ \end{array}$$

● HCl

RN 283178-75-6 HCAPLUS

CN 3-Quinolinecarboxamide, 1,2-dihydro-7-methoxy-2-oxo-8-propoxy-N-[2-(4-

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pyridinyl)ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{OPr-n} & \text{H} & \text{O} \\ \hline & \text{H} & \text{O} \\ \hline & \text{C-NH-CH}_2\text{-CH}_2 \\ \hline & \text{O} \\ \end{array}$$

#### IT 283179-05-5P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of oxoquinoline compds. used as immunosuppressive, anti-inflammatory, and anti-allergic agents)

RN 283179-05-5 HCAPLUS

CN Carbamic acid, 4-pyridinyl-, (8-butoxy-1,2-dihydro-7-methoxy-2-oxo-3-quinolinyl)methyl ester (9CI) (CA INDEX NAME)

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 13 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 2000:227631 HCAPLUS

DN 132:251085

TI Preparation of 2-substituted heterocyclic sulfonamides as non-immunosupressive hair growth promoters

IN McIver, John Mcmillan; Degenhardt, Charles Raymond; Eickhoff, David Joseph

PA The Procter & Gamble Company, USA

SO PCT Int. Appl., 52 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PAN.	CNT I		
	PATENT NO.	KIND DATE	APPLICATION NO. DATE
ΡI	WO 2000018735	A1 20000406	WO 1999-US22212 19990924
	W: AU, BR,	CA, CN, JP, MX	
			ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
	PT, SE		
	US 6300341	B1 20011009	US 1999-400679 19990921
	AU 9960599	A1 20000417	AU 1999-60599 19990924
	BR 9914208	A 20010703	BR 1999-14208 19990924
	EP 1119550	A1 20010801	EP 1999-969716 19990924
	R: AT, BE,	CH, DE, DK, ES,	FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
	IE, FI		
PRAI	US 1998-102539P	P 19980930	

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WO 1999-US22212 W 19990924

- OS MARPAT 132:251085
- GI For diagram(s), see printed CA Issue.
- The title compds. I [V = heteroatom; G = alkyl, alkenyl, cycloalkyl, etc.; Z is a heterocycle; W = nil, H, alkyl; A = nil, alkyl; X, Y = CO, N, O, S; R2, R3 = nil, H, alkyl, arylalkyl; R4 = alkyl; R5, R6 = nil, H, alkyl, aryl, etc; Q = CH2, CHR7, NR7, S, SO, SO2; R7-R10 = nil, H, alkyl, alkenyl, etc.], useful for treating hair loss in mammals, were prepd. E.g., (S)-N-(3,4-dimethoxyphenylsulfonyl)-1,2,3,4-tetrahydro-3-isoquinolinecarboxylic acid 1,7-diphenyl-4-heptylamide was prepd.
- IT 262843-24-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of heterocyclic sulfonamides as non-immunosuppressive hair growth promoters)

- RN 262843-24-3 HCAPLUS
- CN 2,3-Pyridinedicarboxamide, N,N'-bis(4-phenylbutyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & \circ \\
 & | \\
 & C - NH - (CH_2)_4 - Ph
\end{array}$$

$$\begin{array}{c|c}
 & \circ \\
 & C - NH - (CH_2)_4 - Ph
\end{array}$$

### RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L28 ANSWER 14 OF 54 HCAPLUS COPYRIGHT 2002 ACS
- AN 1999:776522 HCAPLUS
- DN 132:248532
- TI Searching for immunosuppressive and anti-HIV active constituents from Tripterygium genus
- AU Duan, Hongquan; Takaishi, Yoshihisa; Bando, Masahiko; Kido, Masaru; Momota, Hiroshi; Ohmoto, Yasukazu; Taki, Takao; Imakura, Yasuhiro; Lee, Kuohsiung; Jia, Yongfong; Li, Duan
- CS Faculty of Pharmaceutical Sciences, University of Tokushima, Japan
- SO Tennen Yuki Kagobutsu Toronkai Koen Yoshishu (1999), 41st, 535-540 CODEN: TYKYDS
- PB Nippon Kagakkai
- DT Journal
- LA Japanese
- GΙ

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AΒ Tripterygium has been used as traditional Chinese medicine for the treatment of cancer and as an insecticide for hundreds of years. Recently, the exts. (the so-called total multi-glycoside or T11) derived from a water/chloroform ext. of the roots of T. wilfordii Hook f. have been used in clin. treatment of rheumatoid arthritis, skin disorders, in male-fertility control and other inflammatory and autoimmune diseases. The precise mechanism of the therapeutic effect of T11, however, has not been completely delineated. In order to search bioactive constituents of this genus, the authors started work on the isolation of the immunosuppressive and anti-HIV active principles of T. hypoglaucum and the exts. (T11) of T. wilfordii. Repeated column chromatog. of the EtOAc-sol. fraction from the methanol ext. of the root bark of Tripterygium hypoglaucum (Levi.) Hutch and the exts. of T. wilfordii Hook f. yielded five novel sesquiterpene derivs., including I, from T. hypoglaucum and eleven new sesquiterpene alkaloids, three new diterpenoids (e.g. 3.beta., 19-dihydroxyabieta-8, 11, 13-triene) from the exts. (T11) of T. wilfordii. I was a sesquiterpene pyridine alkaloid derived from dihydroagarofuran polyol esters; it was shown to contain evoninic acid and a monoterpene moiety by anal. of 2D NMR spectral data, and finally its structure was detd. by x-ray anal. I had a monoterpene structure bonded to the sesquiterpene mol. by ester linkage and is a unique sesquiterpenoid first found in a natural source. In bioactive screening of the compds. isolated, the authors examd. inhibitory effect on cytokine prodn. and anti-HIV activity. II and another compd. showed significant inhibitory effect on cytokine prodn. from lipopolysaccharide-stimulated human peripheral mononuclear cells compared with the ref. compd. (prednisolone). A compd. with a dihydroagarofuran skeleton inhibited HIV replication in H9 lymphocytes with an EC50 value of <0.10 mg/mL and inhibited uninfected H9 cell growth with an IC50 value of >100 mg/mL; the calcd. therapeutic index value was >1000. In general, TI>5.0 is considered to be significant activity; 4 compds. showed extremely potent anti-HIV activity with a TI value of >1000, uncommon in bioactive compds. from a natural source.

IT 262601-66-1P

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study);

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OCCU (Occurrence); PREP (Preparation) (isolation from Tripterygium wilfordii and structure of) RN 262601-66-1 HCAPLUS 3-Pyridinecarboxylic acid, (8R, 9R, 10R, 11S, 12R, 13R, 14R, 15S, 18S, 19S, 20S, 21S, CN 22S)-10,13,14,21-tetrakis(acetyloxy)-12-[(acetyloxy)methyl]-5,7,8,9,10,12,13,14,15,17,18,19-dodecahydro-20-hydroxy-8,18,19,20tetramethyl-5,17-dioxo-8,11-epoxy-9,12-ethano-11,15-methano-11H-

[1,8]dioxacycloheptadecino[4,3-b]pyridin-22-yl ester (9CI) (CA INDEX

#### IΤ 259823-31-9P

CN

NAME)

RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)

(novel sesquiterpene deriv. from Tripterygium hypoglaucum root bark and its anti-HIV activity)

RN 259823-31-9 HCAPLUS

> 3-Pyridinecarboxylic acid, (8R,9R,10R,11S,12R,13R,14R,15S,20S,21S,22R)-13,21,22-tris(acetyloxy)-12-[(acetyloxy)methyl]-10-(benzoyloxy)-5,7,8,9,10,12,13,14,15,17,18,19-dodecahydro-20-hydroxy-8,18,19,20tetramethyl-5,17-dioxo-8,11-epoxy-9,12-ethano-11,15-methano-11H-[1,8]dioxacycloheptadecino[4,3-b]pyridin-14-yl ester (9CI) (CA INDEX NAME)

Page 63

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#### PAGE 1-A

#### PAGE 2-A

#### IT 226975-99-1P

RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)

(novel sesquiterpene deriv. from Tripterygium hypoglaucum root bark and its anti-HIV and immunosuppressive activity)

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RN 226975-99-1 HCAPLUS

CN 3-Pyridinecarboxylic acid, (8R,9R,10R,11S,12R,13R,14R,15S,20S,21S,22R)-13,14,21-tris(acetyloxy)-12-[(acetyloxy)methyl]-10-[(2-furanylcarbonyl)oxy]-5,7,8,9,10,12,13,14,15,17,18,19-dodecahydro-20-hydroxy-8,18,19,20-tetramethyl-5,17-dioxo-8,11-epoxy-9,12-ethano-11,15-methano-11H-[1,8]dioxacycloheptadecino[4,3-b]pyridin-22-yl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

Page 65

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PAGE 2-A

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L28 ANSWER 15 OF 54 HCAPLUS COPYRIGHT 2002 ACS
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AN1999:690954 HCAPLUS

DN 131:307106

Use of vitamin PP compounds as cytoprotective agents in chemotherapy TI

IN Biedermann, Elfi; Hasmann, Max; Loser, Roland; Rattel, Benno; Reiter, Friedemann; Schein, Barbara; Schemainda, Isabel; Seibel, Klaus; Vogt, Klaus; Wosikowski, Katja

PA Klinge Pharma GmbH, Germany

SO PCT Int. Appl., 145 pp. CODEN: PIXXD2

DT

Patent

LΑ English

FAN.CNT 1

PA	TENT	NO.		KI:	ND 	DATE						ON NO		DATE			l:	-qu
PI WO	9953	920		А	1	19991028			WO 1999-EP2686					19990421				, ( <sup>1</sup> )
	W:													CH,			CZ,	Ke
		DE,	DK,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	
		JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	
		MN,	MW,	MX,	NO,	ΝZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	
		TM,	TR,	TT,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZW,	ΑM,	ΑZ,	BY,	KG,	ΚZ,	
		MD,	RU,	ТJ,	TM													
	RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SL,	SZ,	UG,	ZW,	ΑT,	ΒE,	CH,	CY,	DE,	DK,	
		ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	
		CI,	CM,	GA,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG						
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EP	1031	564					20000830		EP 1999-103814					19990226				
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	SI,	LT,	LV,	FΙ,	RO											
	9939					1999	1108		Αl	U 19	99-3	9282		1999	0421			
EP	1079	832		A.	1	2001	0307		E.	P 19	99-9	22119	9	1999	0421			
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JP	2002	5121	90	T	2	2002	0423		J	P 20	00-5	44324	4	1999	0421			
WO	2000	0503	99	A.	1	2000	0831		Mo	20	00-E	P1628	3	2000	0228			
	W:	ΑE,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,	CU,	

Mis Page Dienk (Lipho)

July 3, 2002

CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG 20011121 EP 2000-907642 20000228 EP 1154998 A1 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO PRAI DE 1998-19818044 A 19980422 EP 1999-103814 Α 19990226 WO 1999-EP2686 W 19990421 20000228 WO 2000-EP1628 OS MARPAT 131:307106

The invention relates to the use of vitamin PP compds. and/or compds. with AΒ anti-pellagra activity such as for example nicotinic acid (niacin), and nicotinamide (niacin-amide, vitamin PP, vitamin B3) for the redn., elimination or prevention of side-effects of different degrees as well as for neutralization of acute side-effects in immunosuppressive or cancerostatic chemotherapy or diagnosis, esp. with substituted pyridine carboxamides, as well as combination medicaments with an amt. of compds. with vitamin B3 and/or anti-pellagra activity and chemotherapeutic agents are esp. considered in the mentioned chemotherapies and indications. Nicotinamide at 500 mg/kg twice daily protected mice treated i.p. with antitumor N-[4-(1-diphenylmethylpiperidin-4-yl)butyl]-3-(pyridin-3yl)propionamide. There were no deaths in the nicotinamide-treated mice and the strong redn. of leukocytes was completely prevented.

59-67-6, Nicotinic acid, biological studies 98-92-0, IT Nicotinamide 11032-50-1, Vitamin PP RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(vitamin PP compds. as cytoprotective agents in chemotherapy)

RN 59-67-6 HCAPLUS

3-Pyridinecarboxylic acid (9CI) (CA INDEX NAME) CN

98-92-0 HCAPLUS RN

CN 3-Pyridinecarboxamide (9CI) (CA INDEX NAME)

The Fago Sienk (uspic)

RN 11032-50-1 HCAPLUS

CN Vitamin PP (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

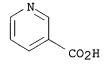
IT 59-67-6D, Nicotinic acid, derivs. 98-92-0D,

Nicotinamide, derivs.

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (vitamin PP compds. as cytoprotective agents in chemotherapy)

RN 59-67-6 HCAPLUS

CN 3-Pyridinecarboxylic acid (9CI) (CA INDEX NAME)



RN 98-92-0 HCAPLUS

CN 3-Pyridinecarboxamide (9CI) (CA INDEX NAME)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 16 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:495258 HCAPLUS

DN 131:129907

TI Preparation and formulation of tricyclic compounds as immunosuppressants and allergy inhibitors

IN Tanimoto, Norihiko; Hasegawa, Yasushi; Haga, Nobuhiro

PA Shionogi & Co., Ltd., Japan

SO PCT Int. Appl., 298 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.			KI	ND	DATE			APPLICATION NO.					DATE					
ΡI	WO	9938	829		 A	 1	1999	 0805		M	 0 19	 99-ј	 P297		1999	 0126			
		W:	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,	
			DK,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	
			ΚE,	KG,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	
			MΧ,	NO,	ΝZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	
			TT,	UA,	UG,	US,	UZ,	VN,	YU,	ZW,	AM,	AZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM
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			FI,	FR,	GB,	GR,	IE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	
			CM,	GΑ,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG							
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This rage thank (uspin)

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AU 9919837
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     AU 742641
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                                                               19990126
     EP 1052238
                       A1
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     NO 2000003706
                       Α
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PRAI JP 1998-15554
                       Α
                             19980128
     WO 1999-JP297
                       W
                             19990126
os
     MARPAT 131:129907
GΙ
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$$\begin{pmatrix}
C \\
W^2
\end{pmatrix}
V^2 - \begin{pmatrix}
B \\
W^2
\end{pmatrix}
V^1 - \begin{pmatrix}
A \\
W^1
\end{pmatrix}
X - Y$$
I

prodn. of IgE were also demonstrated.

AB The title compds. I [each of ring A, ring B and ring C is independently a substituted or unsubstituted arom. ring or a substituted or unsubstituted five or six-membered heterocycle which may be condensed with a benzene ring; when ring A, ring B and/or ring C is a substituted or unsubstituted five-membered heterocycle, W1, W2 and/or W3 represents a bond; X is O or NR1 (where R1 is hydrogen, a lower alkyl or the like); Y is hydrogen, a lower alkyl, a lower alkenyl or the like; one of V1 and V2 is a single bond and the other is a single bond, O, etc.] are prepd. The title compd. II in vitro showed IC50 of 400 ng/mL against the growth of mouse EL4 cells. The inhibiting activities of compds. of this invention against the

II

#### IT 234424-57-8P 234424-60-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of tricyclic compds. as **immunosuppressants** and allergy inhibitors)

RN 234424-57-8 HCAPLUS

CN

Phenol, 5-(4-methoxy-6-methyl-2-phenyl-5-pyrimidinyl)-2-(3-pyridinylmethoxy)- (9CI) (CA INDEX NAME)

This Page Diank (uspin)

RN 234424-60-3 HCAPLUS

CN Phenol, 5-(4-methoxy-6-methyl-2-phenyl-5-pyrimidinyl)-2-(3-pyridinylmethoxy)-, methanesulfonate (ester) (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & MeO & N \\ \hline Me-S-O & MeO & N \\ \hline O & CH_2-O & Me \end{array}$$

## RE.CNT 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 17 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:425755 HCAPLUS

DN 131:58698

TI Preparation of purine derivatives as type 2 helper T cell-selective immune response suppressors

IN Isobe, Yoshiaki; Ogita, Haruhisa; Tobe, Masanori; Takaku, Haruo; Matsui, Hiroyuki; Tomizawa, Hideyuki

PA Japan Energy Corporation, Japan

SO PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN. CNT 1

FAN.	PATENT NO.			KIND DATE					APPLICATION NO. DATE										
ΡI	WO	9932	<b></b> 122		 A	 1	1999	 0701		W	0 19	 98-J	 P577	 9	<u>-</u> 1998	 1221			
		W:	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,	
			DK,	EE,	ES,	FI,	GB,	GD,	GΕ,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	
			ΚE,	KG,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	
			MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	
			TT,	UA,	UG,	US,	UZ,	VN,	YU,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM
		R₩:	GH,	GM,	ΚE,	LS,	MW,	SD,	SZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,	DK,	ES,	
			FΙ,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	
			CM,	•		•	ΜL,			-									
	CA	2315	733		A	Ą	1999	0701		CA 1998-2315733 19981221									
	ΑU	9916	846		A.	1	1999	0712		A	J 199	99-1	6846		1998	1221			
	ΑU	7403	21		B	2	2001	1101											
	EP	1043	021		A.	1	2000	1011		E	P 199	98-9	6145	0	1998	1221			
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙT,	LI,	LU,	NL,	SE,	MC,	PT,	
			ΙE,	FI															

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ZA 9811778 US 6376501 PRAI JP 1997-353462 WO 1998-JP5779	A B1 A W	19990622 20020423 19971222 19981221	ZA 1998-11778 19981222 US 2000-582176 20000621
WO 1998-JP5//9	W	19981221	•
OS MARPAT 131:58698			

GΙ

The title suppressors, immune response modulators and antiallergic agents contain purine derivs. I as the active ingredients, wherein R2 = H or hydrocarbyl, R6 = amino mono- or disubstituted by OH, NH2 or hydrocarbyl, R8 = OH, SH, acyloxy or hydrocarbyloxycarbonyloxy, and R9 = hydrocarbyl, provided that in the hydrocarbyl represented by R2 and R9, -CH2- not directly bonded to the purine skeleton may be replaced by CO, SO2, O or S and C-H not directly bonded to the purine skeleton may be replaced by N, C-halogeno or C-CN. Thus, 8-bromo-9-benzyladenine was heated 5 h in HCl at reflux, cooled, and neutralized with NH3 to prep. 88.5% 9-benzyl-8-hydroxyadenine.

IT 98-92-0, Nicotinamide

RL: RCT (Reactant); RACT (Reactant or reagent)
 (purine derivs. as type 2 helper T cell-selective immune response
 suppressors)

RN 98-92-0 HCAPLUS

CN 3-Pyridinecarboxamide (9CI) (CA INDEX NAME)

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 18 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:419263 HCAPLUS

DN 131:169272

TI Purine metabolites suppress proliferation of human NK cells through a lineage-specific purine receptor

AU Miller, Jeffrey S.; Cervenka, Tereza; Lund, Jeanne; Okazaki, Ian J.; Moss,

CS Department of Medicine, University of Minnesota Cancer Center, Minneapolis, MN, 55455, USA

SO Journal of Immunology (1999), 162(12), 7376-7382 CODEN: JOIMA3; ISSN: 0022-1767 This Page Blank (uspin)

PB American Association of Immunologists

DT Journal

LA English

AB NK cell proliferation is suppressed in some patients with cancer by unknown mechanisms. Because purine metabolites released into the extracellular space during cell lysis may affect cell function, the authors hypothesized that these metabolites could serve as feedback regulators of NK cell proliferation. Sorted NK (CD56+/CD3-) cells were incubated with IL-2 (1000 U/mL) in a 4-day thymidine uptake assay with or without 10-10,000 .mu.M of nucleotides. Adenine nucleotides inhibited NK cell proliferation, with ATP = ADP > 5'-adenylylimidodiphosphate > AMP = adenosine; ADP-ribose and NAD, but not nicotinamide or UTP, caused a dose-dependent suppression of thymidine uptake. A total of 100 .mu.M ATP, a concn. that induced a maximal (80%) inhibition of thymidine uptake, did not inhibit cytotoxic activity against K562 targets. Because NK cells retained the ability to lyse K562 targets 4 days after exposure to 500 .mu.M ATP or 1000 .mu.M adenosine, inhibition of thymidine uptake was not due to cell death. Incubation of NK cells with dibutyryl cAMP and forskolin also suppressed thymidine uptake. Cholera toxin and pertussis toxin suppressed NK cell proliferation. Pertussis toxin did not block the adenine nucleotide effects. Further, ATP, but not adenosine or other nucleotides, markedly increased intracellular cAMP in a dose-dependent manner. The ATP-induced increase in cAMP was specific to cytolytic cells, because CD19+ B cells and CD4+ T cells did not increase their intracellular cAMP. Thus, NK proliferation is regulated via purine receptors by adenine nucleotides, which may play a role in decreased NK cell activity. The response to adenine nucleotides is lineage-specific.

RN 53-84-9 HCAPLUS

CN Adenosine 5'-(trihydrogen diphosphate), P'.fwdarw.5'-ester with 3-(aminocarbonyl)-1-.beta.-D-ribofuranosylpyridinium, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 98-92-0 HCAPLUS

CN 3-Pyridinecarboxamide (9CI) (CA INDEX NAME)

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## RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 19 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:30697 HCAPLUS

DN 130:246551

TI Oxygen radical production in human mononuclear blood cells is not suppressed by drugs used in clinical islet transplantation

AU Weinand, S.; Jahr, H.; Hering, B. J.; Federlin, K.; Bretzel, R. G.

CS Medizinische Klinik III und Poliklinik, Justus-Liebig-Universitat Giessen, Giessen, D-35385, Germany

SO Journal of Molecular Medicine (Berlin) (1999), 77(1), 121-122 CODEN: JMLME8; ISSN: 0946-2716

PB Springer-Verlag

DT Journal

LA English

AΒ Inflammatory islet damage mediated by cytokines and oxygen radicals may limit the success of clin. islet transplantation for treatment of insulin-dependent diabetes mellitus. In this study, we investigated whether drugs such as currently used in islet-transplanted patients inhibit the release of IL-1.beta., TNF.alpha., and superoxide from mononuclear blood cells in vitro. Methylprednisolone (10 .mu.g/mL) inhibited the release of IL-1.beta. and TNF.alpha., but had no effect on superoxide generation. Both pentoxifylline (66 .mu.g/mL) and cyclosporin A (300 ng/mL) slightly inhibited TNF.alpha. release without affecting IL-1.beta. or superoxide generation. Nicotinamide (0.25 mM) did not interfere with the generation TNF.alpha. or superoxide and only slightly inhibited IL-1.beta. prodn. A combination of methylprednisolone, pentoxifylline, cyclosporin A, and nicotinamide inhibited TNF.alpha. generation by 74.+-.6% (mean value.+-.SEM, mononuclear blood cells from seven diabetic patients) without affecting IL-1.beta. or superoxide generation. These data show that std. immunosuppressive therapy in islet transplanted patients may partially inhibit cytokine release but does not affect the generation of potentially islet-toxic superoxide from mononuclear cells.

IT 98-92-0, Nicotinamide

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(oxygen radical prodn. in human mononuclear blood cells is not suppressed by drugs used in clin. islet transplantation)

RN 98-92-0 HCAPLUS

CN 3-Pyridinecarboxamide (9CI) (CA INDEX NAME)

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RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 20 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 1998:603047 HCAPLUS

DN 129:285986

TI Benzimidazole derivatives as immunosuppressant and antiinflammatory drugs

IN Nishi, Takao; Sato, Seiji; Eitani, Takeshi; Yukawa, Hirotaka; Koga, Nobuyuki; Saito, Mikiyasu; Yoshinaga, Shinji

PA Otsuka Pharmaceutical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 51 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
PΙ	JP 10245338	A2	19980914	JP 1998-569	19980106		
	JP 2858002	B2	19990217				
PRAI	JP 1997-74		19970106				
os	MARPAT 129:28598	6					
GI							

$$\begin{array}{c|c}
N & 0 \\
N & C - N - A - N \\
R & R & R & R
\end{array}$$

- AB Benzimidazole derivs. (I; R1 = H, halogen; R2 = Ph low alkyl; R3 = indolyl, indolinyl heterocyclic ring; A = low alkylenyl; n = 0, 1) and their salts are claimed as cGMP PDE inhibitors, cell proliferation inhibitors, collagen synthesis and secretion inhibitors, immunosuppressant and antiinflammatory drugs. I were prepd., and their activities were tested in animal models. Formulation examples e.g. tablets and injections of I were also given.
- IT 187738-91-6P
  RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(benzimidazole derivs. as immunosuppressant and antiinflammatory drugs)

Ι

RN 187738-91-6 HCAPLUS

CN 1H-Benzimidazole-2-carboxamide, 6-chloro-1-(phenylmethyl)-N-[1-[3-[(3-pyridinylcarbonyl)amino]propyl]-1H-indol-5-yl]- (9CI) (CA INDEX NAME)

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L28 ANSWER 21 OF 54 HCAPLUS COPYRIGHT 2002 ACS AN 1998:474064 HCAPLUS
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DN 129:127176

TI Transdermal therapeutic system

IN Dittgen, Michael; Fricke, Sabine; Voelkel, Christoph; Ahrens, Kathrin;
Gerecke, Hagen

PA Jenapharm G.m.b.H. und Co. K.-G., Germany

SO Ger. Offen., 12 pp. CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

		NO.		KI	ND	DATE			A	PPLI	CATI	ON NO	0.	DATE				
WO 9830203			A	2	1998	0716												
		AL, IS, RO,	AU, JP, SG,	BA, KP, SI,	BB, KR, SK,	BG, LC, SL,	BR, LK,	CA, LR,	LT,	LV,	MG,	MK,	MN,	MX,	NO,	NZ,	PL,	
	RW:	GH, FR,	GM, GB,	KE, GR,	LS, IE,	MW,	LU,	MC,	NL,									
AU BR	74093 9806	12 747		B: A	2	2001	1115 0314		ВІ	R 19	98-6	747		1998	0113			
JP	R: 2002	AT, 5126	BE,	CH,	DE, 2	DK, 2002	ES, 0423	FR,	GB, JI	GR,	IT, 98-5	LI, 3047	LU, 1	NL, 1998	SE, 0113	PT,	IE,	FI
US DE WO	20010 1997- 1998-	0180 -197 -DE1	73 01949 57	A: A W	1	20010 19970 19980	0830 0113 0113											
	PATON DE WO WO WO AU BR EP US DE WO	DE 1970 WO 9830 WO 9830 W: RW: AU 9866 AU 7409 BR 9806 EP 10149 R: JP 2002 US 6238 US 20010 DE 1997- WO 1998-	PATENT NO.  DE 19701949 WO 9830203 WO 9830203 W: AL, IS, RO, KZ, RW: GH, FR, GA, AU 9866078 AU 740912 BR 9806747 EP 1014954 R: AT, JP 20025126 US 6238284 US 20010180 DE 1997-197 WO 1998-DE1	PATENT NO.  DE 19701949 WO 9830203 WO 9830203 W: AL, AU, IS, JP, RO, SG, KZ, MD, RW: GH, GM, FR, GB, GA, GN, AU 9866078 AU 740912 BR 9806747 EP 1014954 R: AT, BE, JP 2002512600 US 6238284 US 2001018073 DE 1997-19701949 WO 1998-DE157	PATENT NO. KID  DE 19701949 AL  WO 9830203 AL  W: AL, AU, BA,  IS, JP, KP,  RO, SG, SI,  KZ, MD, RU,  RW: GH, GM, KE,  FR, GB, GR,  GA, GN, ML,  AU 9866078 AL  AU 740912 BZ  BR 9806747 AL  EP 1014954 AL  R: AT, BE, CH,  JP 2002512600 TZ  US 6238284 BZ  US 2001018073 AL  WO 1998-DE157 W	PATENT NO. KIND  DE 19701949 A1  WO 9830203 A2  WO 9830203 A3  W: AL, AU, BA, BB,	PATENT NO. KIND DATE  DE 19701949 A1 1998 WO 9830203 A2 1998 WO 9830203 A3 1999 W: AL, AU, BA, BB, BG,	PATENT NO. KIND DATE  DE 19701949 A1 19980716 WO 9830203 A2 19980716 WO 9830203 A3 19990422 W: AL, AU, BA, BB, BG, BR, IS, JP, KP, KR, LC, LK, RO, SG, SI, SK, SL, TR, KZ, MD, RU, TJ, TM  RW: GH, GM, KE, LS, MW, SD, FR, GB, GR, IE, IT, LU, GA, GN, ML, MR, NE, SN, AU 9866078 A1 19980803 AU 740912 B2 20011115 BR 9806747 A 20000314 EP 1014954 A2 20000705 R: AT, BE, CH, DE, DK, ES, JP 2002512600 T2 20020423 US 6238284 B1 20010529 US 2001018073 A1 20010830 DE 1997-19701949 A 19970113 WO 1998-DE157 W 19980113	PATENT NO. KIND DATE  DE 19701949 A1 19980716 WO 9830203 A2 19980716 WO 9830203 A3 19990422 W: AL, AU, BA, BB, BG, BR, CA,	PATENT NO. KIND DATE  DE 19701949 A1 19980716 D1 WO 9830203 A2 19980716 W0 WO 9830203 A3 19990422  W: AL, AU, BA, BB, BG, BR, CA, CN, IS, JP, KP, KR, LC, LK, LR, LT, RO, SG, SI, SK, SL, TR, TT, UA, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, FR, GB, GR, IE, IT, LU, MC, NL, GA, GN, ML, MR, NE, SN, TD, TG AU 9866078 A1 19980803 AU AU 740912 B2 20011115 BR 9806747 A 20000314 BI EP 1014954 A2 20000705 E1 R: AT, BE, CH, DE, DK, ES, FR, GB, JP 2002512600 T2 20020423 JI US 6238284 B1 20010529 US US 2001018073 A1 20010830 US DE 1997-19701949 A 19970113 WO 1998-DE157 W 19980113	PATENT NO. KIND DATE APPLI  DE 19701949 A1 19980716 DE 19 WO 9830203 A2 19980716 WO 19 WO 9830203 A3 19990422  W: AL, AU, BA, BB, BG, BR, CA, CN, CU, IS, JP, KP, KR, LC, LK, LR, LT, LV, RO, SG, SI, SK, SL, TR, TT, UA, US, KZ, MD, RU, TJ, TM  RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, FR, GB, GR, IE, IT, LU, MC, NL, PT, GA, GN, ML, MR, NE, SN, TD, TG  AU 9866078 A1 19980803 AU 19 AU 740912 B2 20011115 BR 9806747 A 20000314 BR 19 AU 740912 B2 20011115 BR 9806747 A 20000314 BR 19 EP 1014954 A2 20000705 EP 19 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, JP 2002512600 T2 20020423 JP 19 US 6238284 B1 20010529 US 19 US 2001018073 A1 20010830 US 20 DE 1997-19701949 A 19970113 WO 1998-DE157 W 19980113	PATENT NO. KIND DATE APPLICATION APPLICATI	PATENT NO. KIND DATE APPLICATION NO. DE 19701949 A1 19980716 DE 1997-19701 WO 9830203 A2 19980716 WO 1998-DE157 WO 9830203 A3 19990422 W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, KZ, MD, RU, TJ, TM  RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, GA, GN, ML, MR, NE, SN, TD, TG  AU 9866078 A1 19980803 AU 1998-66078 AU 740912 B2 20011115 BR 9806747 A 20000314 BR 1998-6747 EP 1014954 A2 20000705 EP 1998-907826 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, JP 2002512600 T2 20020423 US 1999-341416 US 2001018073 A1 20010830 US 2001-801185 DE 1997-19701949 A 19970113 WO 1998-DE157 W 19980113	PATENT NO. KIND DATE APPLICATION NO.  DE 19701949 A1 19980716 DE 1997-19701949 WO 9830203 A2 19980716 WO 1998-DE157 WO 9830203 A3 19990422 W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, KZ, MD, RU, TJ, TM  RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, GA, GN, ML, MR, NE, SN, TD, TG  AU 9866078 A1 19980803 AU 1998-66078 AU 740912 B2 20011115 BR 9806747 A 20000314 BR 1998-6747 EP 1014954 A2 20000705 EP 1998-907826 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, JP 2002512600 T2 20020423 US 6238284 B1 20010529 US 1999-341416 US 2001018073 A1 20010830 US 2001-801184 DE 1997-19701949 A 19970113 WO 1998-DE157 W 19980113	PATENT NO. KIND DATE APPLICATION NO. 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DATE  DE 19701949 A1 19980716 DE 1997-19701949 19970113 WO 9830203 A2 19980716 WO 1998-DE157 19980113 WO 9830203 A3 19990422 W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, GW, HU, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, KZ, MD, RU, TJ, TM  RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, GA, GN, ML, MR, NE, SN, TD, TG  AU 9866078 A1 19980803 AU 1998-66078 19980113 BR 9806747 A 20000314 BR 1998-66078 19980113 BR 9806747 A 20000314 BR 1998-6747 19980113 BR 9806747 A 20000314 BR 1998-6747 19980113 EP 1014954 A2 20000705 EP 1998-907826 19980113 BR 2002512600 T2 20020423 JP 1998-530471 19980113 US 6238284 B1 20010529 US 1999-341416 19990910 US 2001018073 A1 20010830 US 2001-801184 20010305 DE 1997-19701949 A 19980113 WO 1998-DE157 W 19980113	PATENT NO. KIND DATE APPLICATION NO. DATE  DE 19701949 A1 19980716 DE 1997-19701949 19970113 WO 9830203 A2 19980716 WO 1998-DE157 19980113 WO 9830203 A3 19990422 W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, GW, HU, ID, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KZ, MD, RU, TJ, TM  RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, GA, GN, ML, MR, NE, SN, TD, TG  AU 9866078 A1 19980803 AU 1998-66078 19980113 AU 740912 B2 20011115 BR 9806747 A 20000314 BR 1998-66078 19980113 AU 740912 B2 20011115 BR 9806747 A 20000314 BR 1998-6747 19980113 AU 740912 B2 20010115 BR 9806747 A 20000705 EP 1998-907826 19980113 BF 1014954 A2 20000705 EP 1998-907826 19980113 BR 1998-6747 19980113 US 6238284 B1 20010529 US 1999-341416 19990910 US 2001018073 A1 20010830 US 2001-801184 20010305 DE 1997-19701949 A 19970113 WO 1998-DE157 W 19980113	PATENT NO. KIND DATE APPLICATION NO. DATE  DE 19701949 A1 19980716 DE 1997-19701949 19970113 WO 9830203 A2 19980716 WO 1998-DE157 19980113 WO 9830203 A3 19990422 W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, GW, HU, ID, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG  AU 9866078 A1 19980803 AU 1998-66078 19980113 AU 740912 B2 20011115 BR 9806747 A 20000314 BR 1998-6747 19980113 AU 740912 B2 20011115 BR 9806747 A 20000314 BR 1998-6747 19980113 EP 1014954 A2 20000705 EP 1998-907826 19980113  R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, JP 2002512600 T2 20020423 JP 1998-530471 19980113 US 6238284 B1 20010529 US 1999-341416 19990910 US 2001018073 A1 20010830 US 2001-801184 20010305

AB A transdermal therapeutic system for use on the skin or mucous membranes comprises an active agent in the form of a solid dispersion in an inert carrier, combined with .gtoreq.1 water structure-breaking agent and/or .gtoreq.1 water structure-reinforcing agent in a common matrix. The water structure-breaking agent is a carboxamide (e.g. urea, nicotinamide, succinamide, AcNHMe) which provides a relaxation time of >120 ms. The water structure-reinforcing agent is a polyol (e.g. glycerin, ethylene glycol, propylene glycol, sugar alc.) which provides a relaxation time of preferably <80 ms. When used in combination to provide a precise flux rate across the skin, the structure-breaking and -reinforcing agents are

Mis Page Blank (USDIO)

preferably in a ratio of (2:1)-(1:2). Thus, a 0.5% testosterone hydrogel contg. testosterone 0.500, gel matrix-forming agent 0.500, solubilizer 1 (not specified) 0.500, solubilizer 2 (not specified) 46.875, and H2O to 100.00 g permeated through cow udder skin (thickness 1.2 mm) at 3.1 .mu.g/cm2/h. Corresponding hydrogels addnl. contg. nicotinamide (0.5 mol/kg), lactose (45 g/kg) as a solid dispersion, or nicotinamide + lactose showed permeation rates of 5.5, 7.4, and 11.8 .mu.g/cm2/h, resp.

- IT 98-92-0, Nicotinamide RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (transdermal therapeutic system)
- 98-92-0 HCAPLUS RN
- 3-Pyridinecarboxamide (9CI) (CA INDEX NAME) CN

- ANSWER 22 OF 54 HCAPLUS COPYRIGHT 2002 ACS
- 1998:12571 HCAPLUS AN
- DN 128:125366
- TI Prevention of photoimmunosuppression and photocarcinogenesis by topical nicotinamide
- ΑU Gensler, Helen L.
- CS Arizona Cancer Center, College of Medicine, Cancer Prevention and Control Program, University of Arizona, Tucson, AZ, 85724, USA
- Nutrition and Cancer (1997), 29(2), 157-162 SO CODEN: NUCADQ: ISSN: 0163-5581
- PB Lawrence Erlbaum Associates, Inc.
- DTJournal
- LΑ English
- AB UV B irradn. leads to a potent immunosuppression of the capacity to reject syngeneic, antigenic tumors. If this immunosuppression is crit. for the development of most skin tumors, then its prevention should result in prevention of photocarcinogenesis. We previously showed a correlation between the inhibition of photoimmunosuppression and prevention of photocarcinogenesis by dl-.alpha.-tocopherol, tannic acid, or .alpha.-difluoromethylornithine. The current study was designed to det. whether topical nicotinamide, the active form of vitamin B-3, or niacin, prevents immunosuppression and skin cancer in UV-irradiated mice. In a passive transfer assay for immunosuppression, splenocytes from UV-irradiated mice enhanced the growth of antigenic tumor challenges in recipient mice. Treatment of the UV-irradiated mice with 40 .mu.mol of nicotinamide twice weekly starting two weeks before UV irradn. and throughout the expt. prevented this immunosuppression. UVB irradn. consisted of five weekly 30-min exposures to banks of six FS40 Westinghouse fluorescent sunlamps. Mice received approx. 6.2 .times. 105  ${\rm J/m2}$  in the passive transfer assays and 1.09 .times. 106  ${\rm J/m2}$  in the photocarcinogenesis studies. Application of nicotinamide to UV-irradiated mice reduced skin tumor incidence from 75% to 42.5% (p = 0.016, Cox proportional hazards anal.). Thus topical nicotinamide prevented the immunosuppression and skin tumor induction by UVB irradn.

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IT 98-92-0, Nicotinamide

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(prevention of photoimmunosuppression and photocarcinogenesis by topical nicotinamide)

RN 98-92-0 HCAPLUS

CN 3-Pyridinecarboxamide (9CI) (CA INDEX NAME)

L28 ANSWER 23 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 1997:713985 HCAPLUS

DN 128:3225

TI Pyridoxine deficiency: new approaches in immunosuppression and chemotherapy

AU Trakatellis, Antonios; Dimitriadou, Afrodite; Trakatelli, Myrto

CS Department of Biological Chemistry, Medical School, Aristoteles University of Thessaloniki, Greece

SO Postgraduate Medical Journal (1997), 73(864), 617-622 CODEN: PGMJAO; ISSN: 0032-5473

PB BMJ Publishing Group

DT Journal; General Review

LA English

A review with 25 refs. Pyridoxine deficiency leads to impairment of AΒ immune responses. It appears that the basic derangement is the decreased rate of prodn. of one-carbon units necessary for the synthesis of nucleic acids. The key factor is a pyridoxine enzyme, serine hydroxymethyltransferase. This enzyme is very low in resting lymphocytes but increases significantly under the influence of antigenic or mitogenic stimuli, thus supplying the increased demand for nucleic acid synthesis during an immune response. Serine hydroxymethyl-transferase activity is depressed by deoxypyridoxine, a potent antagonist of pyridoxal phosphate, and also by known immunosuppressive or antiproliferative agents. The combination of these agents is additive. Our results lead us to suggest the following medical applications: (a) combination of deoxypyridoxine with immunosuppressive or chemotherapeutic drugs may be effective in cases of immunosuppressive therapy or organ transplantation, (b) the development of special agents directed against the serine hydroxymethyltransferase apoprotein may prove to be a valuable medical tool, since this enzyme presents an excellent target for chemotherapy, (c) lymphocytes of individual patients could be used to design tailor-made specific immunosuppressive or chemotherapeutic treatment, and (d) the serine hydroxymethyltransferase activity of lymphocyte culture presents an excellent indicator for the evaluation of potency of immunosuppressive, chemotherapeutic or genotoxic compds. in a simple and rapid test.

IT 65-23-6

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (deficiency; pyridoxine deficiency in new approaches to

This Pago Siank (uspio)

09/693,558 July 3, 2002

#### immunosuppression and chemotherapy)

RN 65-23-6 HCAPLUS

CN 3,4-Pyridinedimethanol, 5-hydroxy-6-methyl- (9CI) (CA INDEX NAME)

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(pyridoxine deficiency in new approaches to immunosuppression and chemotherapy

L28 ANSWER 24 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 1997:617007 HCAPLUS

DN 127:288186

TI Methods of treating neurological diseases and etiologically related symptomology using carbonyl trapping agents in combination with previously known medicaments

IN Shapiro, Howard K.

PA USA

SO U.S., 37 pp., Cont.-in-part of U.S. Ser. No. 26,617, abandoned. CODEN: USXXAM

DT Patent

LA English

FAN.CNT 3

1111	CIVI						
	PATENT NO.	KIND DATE	APPLICATION NO.	DATE			
ΡI	US 5668117	A 19970916	US 1993-62201	19930629			
	WO 9501096	A1 19950112	WO 1994-US7277	19940628			
	W: AU, CA,	JP					
	RW: AT, BE,	CH, DE, DK, ES, FR,	GB, GR, IE, IT, LU	, MC, NL, PT, SE			
	CA 2166383	AA 19950112	CA 1994-2166383	19940628			
	AU 9472144	A1 19950124	AU 1994-72144	19940628			
	AU 692454	B2 19980611					
	EP 707446	A1 19960424	EP 1994-921405	19940628			
	R: DE, FR,	GB, IT					
	JP 08512055	T2 19961217	JP 1994-503597	19940628			
PRA	US 1991-660561	19910222					
	US 1993-26617	19930223					
	US 1993-62201	19930629					
	WO 1994-US7277	19940628					
	105 0001	0.5					

OS MARPAT 127:288186

AB Therapeutic compns. comprising an effective amt. of at least one carbonyl trapping agent alone or in combination with a therapeutically effective of a co-agent or medicament are disclosed. The compns. are used to treat a mammal suffering from a neurol. disease characterized by covalent bond crosslinking between the nerve cells, other cellular structures and their intracellular and extracellular components, with disease-induced carbonyl-contg. aliph. or arom. hydrocarbons present in mammals.

IT 58-56-0, Pyridoxine hydrochloride 59-67-6, Nicotinic acid, biological studies 98-92-0, Nicotinamide

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RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(carbonyl trapping agent combination with other drug for treatment of neurol. diseases and etiol. related symptomol.)

RN 58-56-0 HCAPLUS

CN 3,4-Pyridinedimethanol, 5-hydroxy-6-methyl-, hydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 59-67-6 HCAPLUS

CN 3-Pyridinecarboxylic acid (9CI) (CA INDEX NAME)

RN 98-92-0 HCAPLUS

CN 3-Pyridinecarboxamide (9CI) (CA INDEX NAME)

L28 ANSWER 25 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 1997:562996 HCAPLUS

DN 127:239123

TI Combinations having immunosuppressive effects, containing cyclooxygenase-2-inhibitors and 5-lipoxygenase inhibitors

IN Gregory, Susan A.; Isakson, Peter C.; Anderson, Gary

PA G.D. Searle & Co., USA; Gregory, Susan A.; Isakson, Peter C.; Anderson, Gary

SO PCT Int. Appl., 68 pp. CODEN: PIXXD2

DT Patent

LA English

inis Paga Blank (uspio)

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FAN.CNT 1
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                       KIND
                             DATE
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                                                               DATE
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                       A1
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                                                               19970212
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             DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN,
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                                             CA 1997-2246265
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                                                               19970212
                        A1
     EP 888127
                        A1
                             19990107
                                             EP 1997-904133
                                                               19970212
                             20011212
     EP 888127
                        В1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI
                       Т2
     JP 2000504723
                             20000418
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                                                               19970212
     AT 210461
                        E
                             20011215
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                                                               19970212
     US 6376528
                        В1
                             20020423
                                             US 1999-430072
                                                               19991018
PRAI US 1996-600622
                             19960213
                        Α1
     WO 1997-US1558
                        W
                             19970212
     US 1998-189463
                        В1
                             19981110
OS
     MARPAT 127:239123
     Treatment with a cyclooxygenase-2 inhibitor and a 5-lipoxygenase inhibitor
ΑB
     is described as being useful in reducing recipient rejection of
     transplanted organs and for treatment of autoimmune diseases.
     4-[5-(3-Fluoro-4-methoxyphenyl)-3-(difluoromethyl)-1H-pyrazol-1-
     yl]benzenesulfonamide and N'-[3-[5-(4-fluorophenoxy)-2-furyl]-1-methyl-2-
     propynyl]-N'-hydroxyurea were prepd. and a combination of these 2 compds.
     showed a delay in rejection time of skin grafts while treatment alone of
     each of these compds. resulted in no prolongation of graft survival.
IT
     143964-80-1, F-1322
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (cyclooxygenase-2 and 5-lipoxygenase inhibitor combinations with
        immunosuppressive effects)
     143964-80-1 HCAPLUS
RN
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CN

2-Naphthalenecarboxamide, N-[2-[4-(diphenylmethoxy)-1-piperidinyl]ethyl]-3-

hydroxy-5-(3-pyridinylmethoxy)- (9CI) (CA INDEX NAME)

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L28 ANSWER 26 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 1997:278841 HCAPLUS

DN 126:277343

TI Preparation of mycophenolic acid derivatives as immunosuppressants

IN Iino, Yukio; Fujita, Koichi; Tsuji, Hisashi; Shiozaki, Makoto; Ishizaki, Sonoko

PA Ajinomoto Kk, Japan

SO Jpn. Kokai Tokkyo Koho, 19 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

Ι

GI

$$R^{2}$$
 $R^{2}$ 
 $R^{4}$ 
 $COOR^{1}$ 
 $R^{2}$ 
 $R^{2}$ 
 $R^{2}$ 
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 $R^{4}$ 

AB Title compds. I [R1 = H, alkyl; R2, R3 = H, Me, etc.; R4 = (un)substituted alkyl, (un)substituted alkenyl, (un)substituted alkynyl, (un)substituted Ph, (un)substituted heterocyclyl, alkoxy, (un)substituted phenoxy, etc.] are prepd. and their absorption and toxicity were studied. Thus, stirring a mixt. of Et mycophenolate and 4-methoxybenzyl chloride in DMF contg. K2CO3 at room temp. for 40 h gave 90% I [R1 = Et, OR2R3R4 = O-CH2-C6H4-OMe-p]. I [R1 = H, OR2R3R4 = O-CH2-C6H4-OMe-o], also prepd., showed absorption comparable to that of mycophenolic acid; its toxicity to the small intestine as indicated by the activity of alk. phosphatase was comparable to that of mofetil mycophenolate.

IT 188711-57-1P 188711-87-7P

RL: ADV (Adverse effect, including toxicity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of mycophenolic acid derivs. as immunosuppressants)

RN 188711-57-1 HCAPLUS

CN 4-Hexenoic acid, 6-[1,3-dihydro-6-methoxy-7-methyl-3-oxo-4-(3-pyridinylmethoxy)-5-isobenzofuranyl]-4-methyl-, ethyl ester, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

This ruge Bionk (Lepic)

RN 188711-87-7 HCAPLUS

CN 4-Hexenoic acid, 6-[1,3-dihydro-6-methoxy-7-methyl-3-oxo-4-(3-pyridinylmethoxy)-5-isobenzofuranyl]-4-methyl-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

L28 ANSWER 27 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 1996:674432 HCAPLUS

DN 125:293019

TI Compositions comprising nicotinylalanine and vitamin B6 or an inhibitor of glycine conjugation

IN Shaskan, Edward G.

PA USA

SO PCT Int. Appl., 86 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

PATENT NO.

KIND DATE

APPLICATION NO. DATE

# inis Page Diank (uspio)

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WO 1996-US3435
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     WO 9628167
                      A1
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             LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
             SG, SI
         RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
             IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA
     CA 2215319
                            19960919
                                         CA 1996-2215319 19960313
                      AΑ
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                            19961002
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                                           EP 1996-909681
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                            19980107
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                                                            19970912
                      Α
PRAI US 1995-403676
                            19950314
    US 1995-581394
                            19951229
    WO 1996-US3435
                            19960313
OS
    MARPAT 125:293019
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This invention relates to methods and compns. comprising nicotinylalanine, AΒ and/or related analogs, and an inhibitor, such as aspirin, of glycine conjugation, which are useful for inhibiting cellular poly-(ADP-ribose) synthetase in vitro and/or in vivo. This enzyme is activated in a variety of toxic and pathol. conditions and is inhibited by nicotinamide. B6 may also be present in the compns. of this invention in place of, or in addn. to the inhibitor of glycine conjugation. Such pathol. conditions include, for example, neurodegenerative disorders, viral infections, autoimmune diseases and cancer. Accordingly, this invention relates to methods of reducing cellular toxicity and treating such diseases by increasing cellular nicotinamide using the methods and compns. of this invention.

ΙT 36724-75-1

> RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(compns. comprising nicotinylalanine and vitamin B6 or an inhibitor of glycine conjugation)

RN 36724-75-1 HCAPLUS

L-Alanine, N-(3-pyridinylcarbonyl) - (9CI) (CA INDEX NAME) CN

Absolute stereochemistry.

ΙT 98-92-0, Nicotinamide

> RL: BPR (Biological process); BIOL (Biological study); PROC (Process) (compns. comprising nicotinylalanine and vitamin B6 or an inhibitor of glycine conjugation)

RN98-92-0 HCAPLUS

CN 3-Pyridinecarboxamide (9CI) (CA INDEX NAME) This Page Mank (uspic)

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L28 ANSWER 28 OF 54 HCAPLUS COPYRIGHT 2002 ACS
AN
     1996:228585 HCAPLUS
DN
     124:250901
     Combination drug with immunosuppressive, cardiovascular, and cerebral
ΤI
IN
     Schoenharting, Martin; Muellner, Stefan; Zabel, Peter
PA
     Hoechst A.-G., Germany
SO
     Ger. Offen., 11 pp.
     CODEN: GWXXBX
DT
     Patent
     German
LΑ
FAN.CNT 1
                     KIND DATE
     PATENT NO.
                                          APPLICATION NO. DATE
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                                          _____
PΤ
                      A1
                            19960229
                                          DE 1994-4430128 19940825
     DE 4430128
     WO 9605838
                      A2
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                      В2
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PRAI DE 1994-4430128 A
                           19940825
     WO 1995-EP3125 W
                           19950807
     US 1997-793417
                           19970225
                     A1
     A combination of a phosphodiesterase inhibitor or adenylate cyclase
AB
     activator which elevates the intracellular cAMP content with a compd.
     which lowers the effective intracellular Ca2+ content, administered
     simultaneously, sep., or at timed intervals, shows synergistic enhancement
     of immunosuppressive, cardiovascular, and cerebral activity. Thus,
     dibutyryl cAMP and the Ca2+ channel blocker nifedipine synergistically
     inhibited release of interleukin 2 and .gamma.-interferon by
     phytohemagglutinin-activated human peripheral blood mononuclear cells.
IT
     27848-84-6, Nicergoline
     RL: BAC (Biological activity or effector, except adverse); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (combination drug with immunosuppressive, cardiovascular, and
        cerebral activity)
     27848-84-6 HCAPLUS
RN
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CN Ergoline-8-methanol, 10-methoxy-1,6-dimethyl-, 5-bromo-3pyridinecarboxylate (ester), (8.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L28 ANSWER 29 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 1995:846523 HCAPLUS

DN 123:256538

TI Preparation of carbocyclic and heterocyclic fused-ring quinolinecarboxylic acid immunosuppressive agents

IN Magolda, Ronald Louis; Pitts, William John; Jacobson, Irina Cipora; Behrens, Carl Henry; Orwat, Michael James; Batt, Douglas Guy

PA Du Pont Merck Pharmaceutical Co., USA

SO PCT Int. Appl., 105 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

2121	PATENT NO.			KIND	DATE		APPLICATION NO.	DATE			
ΡI	 ₩0	 9506640		 Δ1	19950309		WO 1994-US9463	19940826			
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	AU	9476358		<b>A</b> 1	19950322		AU 1994-76358	19940826			
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	HU	74585		A2	19970128		HU 1996-501	19940826			
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	RU	2133740		C1	19990727		RU 1996-107400	19940826			
	IL	110821		A1	19970415		IL 1994-110821	19940830			
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	US	5874441	Α	19990223	US	1997-820222	19970318
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PRAI	US	1993-114712	Α	19930831			
	WO	1994-US9463	W	19940826			
	US	1995-411251	A3	19950327			
	US	1997-820222	A3	19970318			
OS	MAI	RPAT 123:256538					
GI							

- \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT \*
- AB The title compds. [I, II; R1, R2 = H, C1, Br, CF3, alkyl; R3 = Ph, PhO, PhS (un)substituted PhNH, heterocyclyl, etc.; X = YCH2, CH2Y, CH2CH2Y, YCH2CH2, etc.; Y = (un)substituted CH2, O, S, (un)substituted NH; Z1-Z3 = N, (un)substituted CH] (e.g., I; R1 = 6-F, R2 = H, R3 = 4-MeC6H4, X = CH2CH2, Z1-Z3 = CH) [III; Q1, Q2 = S, (un)substituted NH, (un)substituted CH] (IV; Q3, Q4 = N, C; R11 = H, F, C1, Br, CF3, alkyl), useful as immunosuppressants for the treatment of organ transplantation rejection, graft vs. host diseases, autoimmune diseases, cancer, chronic inflammatory diseases, etc., are prepd. and I-, II-, III-, and IV-contg. formulations presented.
- IT 1702-14-3

RL: RCT (Reactant)

(prepn. of carbocyclic and heterocyclic fused-ring quinolinecarboxylic acid immunosuppressive agents from)

RN 1702-14-3 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-methyl-6-phenyl-, ethyl ester (9CI) (CA INDEX NAME)

- L28 ANSWER 30 OF 54 HCAPLUS COPYRIGHT 2002 ACS
- AN 1995:607984 HCAPLUS
- DN 123:83100
- TI Carbamates of rapamycin
- IN Kao, Wenling; Skotnicki, Jerauld S.; Abou-Gharbia, Magid A.; Palmer, Yvette L.
- PA American Home Products Corporation, USA
- SO U.S., 25 pp. Cont.-in-part of U.S. Ser. No. 160,984, abandoned. CODEN: USXXAM
- DT Patent
- LA English
- FAN.CNT 7

PATENT NO. KIND DATE

APPLICATION NO. DATE

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					<del>-</del>
PI	US 5411967	Α	19950502	US 1994-224893	19940408
	US 5302584	Α	19940412	US 1993-54655	19930423
PRAI	US 1992-960597	B2	19921013		
	US 1993-54655	A3	19930423		
	US 1993-160984	B2	19931201		
OS	MARPAT 123.83100				

42- And/or 31-esters of rapamycin with carbamic acids are useful as AB immunosuppressive, antiinflammatory, antifungal, antiproliferative, and antitumor agents. Thus, rapamycin was treated with 4-02NC6H4O2CCl to give the 42-p-nitrophenyl carbonate which was treated with NH3 to give the 42-carbamate. The latter compd. had an IC50 in the lymphocyte proliferation test of 1.7 nM.

59-67-6, Nicotinic acid, reactions IT

RL: RCT (Reactant)

(prepn. of immunosuppressant rapamycin carbamates)

59-67-6 HCAPLUS RN

3-Pyridinecarboxylic acid (9CI) (CA INDEX NAME) CN

## IT 165124-31-2P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of immunosuppressant rapamycin carbamates)

RN165124-31-2 HCAPLUS

CN Rapamycin, 42-ester with 3-pyridinecarboxylic acid 2-carboxyhydrazide (9CI) (CA INDEX NAME)

L28 ANSWER 31 OF 54 HCAPLUS COPYRIGHT 2002 ACS ΆN 1995:403382 HCAPLUS

Tris Page Blank (uspic)

09/693,558 July 3, 2002

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DN
     122:265179
ΤI
     Heterocyclic esters of rapamycin
     Nelson, Frances C.; Schiehser, Guy A.
IN
     American Home Products Corp., USA
PA
SO
     U.S., 11 pp.
     CODEN: USXXAM
DT
     Patent
LΑ
     English
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                            APPLICATION NO.
                                                             DATE
                                            ______
                                            US 1993-156208
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     CA 2176961
                       AA
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                                                             19941116
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                       A1
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             TJ, TT, UA, UZ, VN
         RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU,
             MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN,
             TD, TG
     AU 9510571
                            19950613
                                            AU 1995-10571
                                                             19941116
                       Α1
     EP 730597
                            19960911
                                            EP 1995-901258
                       Α1
                                                             19941116
     EP 730597
                       В1
                            20010307
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE
                            19970603
                                            JP 1994-515166
     JP 09505596
                       T2
                                                             19941116
                                           AT 1995-901258
     AT 199555
                                                             19941116
                       Е
                            20010315
                                           ES 1995-901258
     ES 2154720
                       Т3
                            20010416
                                                             19941116
                            19931122
PRAI US 1993-156208
                       Α
     WO 1994-US13411
                       W
                            19941116
os
    MARPAT 122:265179
GΙ
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- AB A compd. of the structure I wherein R and R1 are each, independently, CO(CH2)nR2 or hydrogen, R2 is a heterocyclic radical which may be optionally substituted; n=0-6; with the proviso that R and R1 are both not hydrogen, or a pharmaceutically acceptable salt thereof which is useful as an immunosuppressive, antiinflammatory, antifungal, antiproliferative, and antitumor agent. Immunosuppressive activity for representative compds. of this invention was evaluated in an in vitro std. pharmacol. test procedure to measure lymphocyte proliferation (LAF) and in three in vivo std. pharmacol. test procedures. Thus, e.g., for rapamycin 42-ester with 2-methylnicotinic acid: LAF IC50 = 1.00 nM; skin graft survival: 11.2 .+-. 0.8 days; percent change in adjuvant arthritis vs. control: -88%; heart allograft survival: 29.9 days, i.p. Pharmaceutical formulations were given.
- IT 162648-40-0P 162648-41-1P 162648-42-2P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(immunosuppressant heterocyclic esters of rapamycin)

- RN 162648-40-0 HCAPLUS
- CN Rapamycin, 42-(2-methyl-3-pyridinecarboxylate) (9CI) (CA INDEX NAME)

- RN 162648-41-1 HCAPLUS
- CN Rapamycin, 42-(3-pyridinecarboxylate) (9CI) (CA INDEX NAME)

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RN162648-42-2 HCAPLUS

CNRapamycin, 42-(6-methyl-3-pyridinecarboxylate) (9CI) (CA INDEX NAME)

IT59-67-6, 3-Pyridinecarboxylic acid, reactions 1721-26-2,

Ethyl 2-methylnicotinate 3222-47-7, 6-Methylpyridine-3carboxylic acid

RL: RCT (Reactant)

(immunosuppressant heterocyclic esters of rapamycin) 59-67-6 HCAPLUS

RN

CN 3-Pyridinecarboxylic acid (9CI) (CA INDEX NAME)

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RN 1721-26-2 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-methyl-, ethyl ester (9CI) (CA INDEX NAME)

RN 3222-47-7 HCAPLUS

CN 3-Pyridinecarboxylic acid, 6-methyl- (9CI) (CA INDEX NAME)

IT 3222-56-8P, 2-Methylnicotinic acid

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (immunosuppressant heterocyclic esters of rapamycin)

RN 3222-56-8 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-methyl- (9CI) (CA INDEX NAME)

L28 ANSWER 32 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 1995:220179 HCAPLUS

DN 122:9774

TI O-alkylated rapamycin derivatives and their use, particularly as immunosuppressants

IN Cottens, Sylvain; Sedrani, Richard

PA Sandoz-Erfindungen Verwaltungsgesellschaft M.B.H., Austria; Sandoz-Patent-GmbH; Sandoz Ltd.

SO PCT Int. Appl., 43 pp.

CODEN: PIXXD2

DT Patent

LA English

This Page Siank (uspic)

FAN.	CNT 1 PATENT NO.	KIND DATE	APPLICATION NO. DATE	
PI	W: AU, CA, RW: AT, BE,	CZ, FI, HU, JP, CH, DE, DK, ES,	WO 1993-EP2604 19930924 KR, NO, NZ, PL, RO, RU, SK, US FR, GB, GR, IE, IT, LU, MC, NL,	
	CA 2145383 AU 9348192	AA 19940428 A1 19940509	CA 1993-2145383 19930924 AU 1993-48192 19930924	
	AU 676198	B2 19970306		
	EP 663916	A1 19950726	EP 1993-920822 19930924	
	EP 663916	B1 19981125		
	R: AT, BE,	CH, DE, DK, ES,	FR, GB, GR, IE, IT, LI, LU, NL,	PT, SE
	HU 71232	A2 19951128	HU 1995-1016 19930924	
	JP 08502266	T2 19960312	JP 1993-509552 19930924	
	CZ 283333	B6 19980218	JP 1993-509552 19930924 CZ 1995-899 19930924 EP 1997-114343 19930924	
	EP 867438	A1 19980930	EP 1997-114343 19930924	
	R: AT, BE,	CH, DE, DK, ES,	FR, GB, GR, IT, LI, LU, NL, SE,	PT, IE
	AT 173736	E 19981215	AT 1993-920822 19930924 ES 1993-920822 19930924	
	ES 2124793	T3 19990216	ES 1993-920822 19930924	
	PL 176174	BI 19990430	PL 1993-308268 19930924	
	RO 114451	B1 19990430	RO 1995-686 19930924	
	RU 2143434 JP 3117462	D2 20001211	RU 1995-110053 19930924 JP 1994-509552 19930924	
	NO 9501312	DZ 20001Z11 λ 10050609	NO 1995-1312 19950405	
	NO 9501512 FT 0501678	A 19950000	FT 1995-1678 19950407	
	FI 9501678 US 5665772	A 19970909	FI 1995-1678 19950407 US 1995-416673 19950407	
	JP 11240884	A2 19990907	JP 1998-308355 19981029	
	FI 2000001943		FI 2000-1943 20000904	
PRAI	GB 1992-21220			
	EP 1993-920822			
	WO 1993-EP2604			
os	MARPAT 122:9774			
GI				

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- AB Novel O-alkylated derivs. of rapamycin I [X = O, H2; Y = O, H,OH; R1, R2 = H, (un)substituted alkyl, alkenyl, organosilyl; R3 = Me; R1R3 = alkylene], esp. 40-O-alkylated derivs., have pharmaceutical utility, particularly as immunosuppressants. Rapamycin was treated with Me3CSiMe2OCH2CH2O3SCF3 and desilylated to give 40-O-(2-hydroxyethyl)rapamycin which had the following IC50 relative to rapamycin 1: mixed lymphocyte reaction 2.2, IL-6-dependent proliferation 2.8, macrophilin binding 3.4.
- RN 159351-80-1 HCAPLUS CN Rapamycin, 42-0-[2-[(3-pyridinylcarbonyl)oxy]ethyl]- (9CI) (CA INDEX NAME)

- RN 159351-90-3 HCAPLUS
- CN Rapamycin, 42-0-[2-[(3-pyridinylcarbonyl)amino]ethyl]- (9CI) (CA INDEX NAME)

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L28 ANSWER 33 OF 54 HCAPLUS COPYRIGHT 2002 ACS

ΑN 1994:435336 HCAPLUS

DN 121:35336

Pyridine derivatives, their production and use as pharmaceuticals ΤI

Takatani, Muneo; Saijo, Taketoshi; Tomimatsu, Kiminori IN

Takeda Chemical Industries, Ltd., Japan PΑ

Can. Pat. Appl., 320 pp. SO

CODEN: CPXXEB

DTPatent

LA English

		1											
		TENT NO.		KINI	DATE		AP	PLICA	TION	NO.	DATE		
PI		2068255		AA									
		522606					EP	1992	-201	288	1992	0507	
		522606											
	EP	522606											
		R: AT,											
		5246948											
		612729					EP	1994	-107	873	1992	0507	
		612729											
	EΡ	612729											
		R: AT,											
	ΑT	136296		E	1996	0415	AT	1992	-201	288	1992	0507	
	ΑT	152102		E	1997								
	JP	05125048		A2	1993	0521	JP	1992	-115	871	1992	3508	
	US	5389658		Α	1995	0214	US	1993	-811	81	1993	3624	
	US	5457106 5561147		Α	1995	1010	US	1994	-334	221	1994	1104	
		5767121					US	1996	-717	022	1996	J920	
PRAI		1991-105											
		1992-2012											
	US	1992-880	641		19920	0507							
		1993-8118											
	US	1994-3342	221		1994	1104							
	US	1995-455	170		1995	0531							

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OS MARPAT 121:35336

GΙ

Pyridines R-X-A-N(R3)-CHR4-Y [R = (un)substituted pyridyl; X = 0, S, SO, SO2; A = C1-15 bivalent hydrocarbon residue with (un)substituted branched moiety; Y = 0, S; R3 = H, hydrocarbyl; R4 = hydrocarbyl, heterocyclyl; R3R4 joined with (thio)carbamoyl group to form (un)substituted heterocyclyl; R3, R4 independently attached to A to form a ring] and their pharmaceutically acceptable salts were prepd. Their immunomodulatory activity or adhesion protein expression inhibitory activity as well as inflammation inhibitory, antipyretic, and analgesic activities are claimed. For example, among specifically claimed compds. is the benzothiophenecarboxamide I.

Ι

IT 155965-84-7P 155966-29-3P 155966-77-1P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of, as inflammation inhibitor, antipyretic, analgesic, antiallergic or immunosuppressant)

RN 155965-84-7 HCAPLUS

CN 3-Pyridinecarboxamide, N-[3-(4-pyridinylthio)propyl]- (9CI) (CA INDEX NAME)

$$0 \\ C-NH-(CH_2)_3-S$$

RN 155966-29-3 HCAPLUS

CN 3-Pyridinecarboxamide, N-[3-(4-pyridinyloxy)propyl]- (9CI) (CA INDEX NAME)

RN 155966-77-1 HCAPLUS

CN 3-Pyridinecarboxamide, N-[(4-pyridinylthio)methyl]- (9CI) (CA INDEX NAME)

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IT 3569-99-1, N-(Hydroxymethyl)nicotinamide

RL: RCT (Reactant)

(reaction of, in prepn. of immunosuppressant pyridines)

RN3569-99-1 HCAPLUS

3-Pyridinecarboxamide, N-(hydroxymethyl)- (9CI) (CA INDEX NAME) CN

ANSWER 34 OF 54 HCAPLUS COPYRIGHT 2002 ACS L28

AN1994:409922 HCAPLUS

121:9922 DN

ΤI Preparation of enepyranose derivatives as immunosuppressing agents

IN Mizukoshi, Sadanori; Kato, Fuminori; Tsukamoto, Masamitsu; Kon, Kenji

PΑ Ishihara Sangyo Kaisha, Ltd., Japan

SO Eur. Pat. Appl., 62 pp.

CODEN: EPXXDW

DTPatent

LΑ English

FAN.	CNT 2				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	EP 560055	A1	19930915	EP 1993-101822	19930205
	R: AT, BE,	CH, DE	, DK, ES, FR	, GB, GR, IE, IT, LI	, LU, MC, NL, PT, SE
	JP 06183965	A2	19940705	JP 1992-361752	19921216
	JP 06316588	A2	19941115	JP 1993-39207	19930118
	JP 3174189	B2	20010611		
	US 5380834	Α	19950110	US 1993-11463	19930127
	CN 1041167	В	19981216	CN 1993-101504	19930206
PRAI	JP 1992-66582	Α	19920206		
	JP 1992-361752	Α	19921216		
OS	MARPAT 121:9922				
GI					

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AΒ Title compds. I [R1 = H, (un) substituted alkyl, alkenyl, alkynyl, OSO2R7, halo, OCOR7, NHCOR8, alkoxy, (un) substituted Ph, saccharose residue; R2 = H, alkyl; R3 = H, halo; R4 = H, COR9, (un) substituted silyl, (un) substituted alkyl; R5 or R6 = OH, (un) substituted alkoxy, saccharose residue, (un) substituted cycloalkoxy, OCOR10 and the other = H, (un) substituted alkyl, or R4 and R5 together form a single bond, while R6 = H, (un)substituted alkyl; R7, R9, R10 = alkyl, (un)substituted Ph; R8 = alkyl, (un) substituted Ph, benzyloxy; X = H, (un) substituted alkyl, (un) substituted alkenyl, (un) substituted alkynyl, (un) substituted Ph, (un) substituted cycloalkyl, (un) substituted pyridyl, (un) substituted furanyl, etc.; Y = H, (un)substituted alkyl, (un)substituted alkenyl, (un) substituted alkynyl] and their salts useful as immunosuppressing or inflammation inhibiting agents were prepd. Thus, 1,6-anhydro-3,4-dideoxy-.beta.-D-threo-hex-3-enopyranos-2-ulose was treated with LiAlH4 in Et2O to give 1,6-anhydro-3,4-dideoxy-.beta.-D-threo-hex-3-enopyranose, which was treated with 2-furancarboxylic acid, DCC, and N,N-dimethylaminopyridine in CH2Cl2 to give the 2-furancarboxylic acid ester (II). II showed inhibiting concn.50 = 1.0, 100, and 3.2 .mu.g/mL, resp., against IgGI, IgM, and IgE antibody prodn. by murine spleen B cells stimulated by lipopolysaccharide and interleukin 4.

IT 154977-06-7P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as immunosuppressing and/or inflammation inhibiting agent)

RN. 154977-06-7 HCAPLUS

CN .beta.-D-threo-Hex-3-enopyranose, 1,6-anhydro-3,4-dideoxy-, 3-pyridinecarboxylate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L28 ANSWER 35 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 1994:260808 HCAPLUS

DN 120:260808

TI Restoration of postburn impaired lymphocyte responsiveness by nonsteroidal

This Page Stank (uspic)

anti-inflammatory drugs is independent of prostaglandin E2 inhibition
AU Mathieu, Jacques; Masson, Isabelle; Chancerelle, Yves; Chanaud, Brigitte;
Strazlko, Suzanne; De Sousa, Martine; Kergonou, Jean Francois; Giroud,
Jean Paul; Florentin, Irene

CS Unite Radiobiochim., Cent. Rech. Serv. Sante Armees, Paris, Fr.

SO J. Leukocyte Biol. (1994), 55(1), 64-72 CODEN: JLBIE7; ISSN: 0741-5400

DT Journal

LA English

Prostaglandin E2 (PGE2) has been implicated in postburn immunosuppression, AΒ which is responsible for septic complications. In the present work, seven nonsteroidal anti-inflammatory drugs (NSAIDs), differing by their capacity to inhibit the cyclooxygenase pathway, were compared for their ability to restore T lymphocyte proliferative responses evaluated 4 days after thermal injury in rats. Salicylic acid, 5-aminosalicylic acid, and niflumic acid, given daily, fully restored spleen cell responses to Con A (Con A) and phytohemagglutinin. These drugs were active only at doses that were below the anti-inflammatory doses and did not modify normal spleen cell responses. In these conditions, indomethacin slightly restored lymphocyte reactivity, whereas acetylsalicylic acid, ketoprofene, and piroxicam were ineffective. PGE2 prodn. by Con A-stimulated spleen cells from untreated burned rats and after treatment with niflumic acid or 5-aminosalicylic acid did not correlate with the intensity of the proliferative response. Indomethacin, niflumic acid, and 5-aminosalicylic acid were added in vitro to spleen cells from normal and burned rats, at concns. from 10-7 to 10-4 M. PGE2 prodn. was strongly depressed by indomethacin and niflumic acid and not modified by 5-aminosalicylic acid. The proliferative response of normal spleen cells were depressed in a concn.-dependent manner by niflumic acid and slightly inhibited at the highest concns. of indomethacin. In contrast, indomethacin concn. dependently restored the burn-impaired proliferative response, whereas niflumic acid further depressed it and 5-aminosalicylic acid had no effect. These results demonstrate that only some NSAIDs are able to restore T lymphocyte reactivity impaired after thermal injury and that this property is not related to inhibition of PGE2 prodn.

IT 4394-00-7, Niflumic acid

RL: BIOL (Biological study)

(T-lymphocyte proliferative response restoration by, in postburn immunosuppression)

RN 4394-00-7 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-[[3-(trifluoromethyl)phenyl]amino]- (9CI) (CA INDEX NAME)

L28 ANSWER 36 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 1994:192219 HCAPLUS

DN 120:192219

TI Preparation of deoxyribonucleoside derivatives as carcinostatics,

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virucides, and immunosuppressants

IN Togo, Hideo; Ishigami, Sachiko; Fujii, Misa; Yokoyama, Masataka

PA Nippon Kayaku Kk, Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
PI	JP 05306283	<b>A</b> 2	19931119	JP 1992-131363	19920427		

OS MARPAT 120:192219

GΙ

AB The title derivs. I (R1 = H, OH protecting group), their physiol. acceptable salts, II (R2 = H, Me; R3 = H, OH protecting group), and their physiol. acceptable salts are prepd. as carcinostatics, virucides, and immunosuppressants (no data). Photoirradn. of a mixt. of 4,6-dibenzoyl-2,5-anhydro-3-deoxy-.beta.-ribohexonic acid (III) and [bis(trifluoroacetoxy)iodo]pentafluorobenzene (IV), and lepidine in CH2Cl2 for 10 h gave 56% (1.beta.)-1-(2-lepidinyl)-3,5-dibenzoyl-D-deoxyribofuranose. Photoirradn. of a mixt. of III, IV, and Me nicotinate in CH2Cl2 for 10 h gave 42% (1.alpha.)-1-[2-(5-methoxycarbonylpyridyl)]-3,5-dibenzoyl-D-deoxyribofuranose.

IT 145383-45-5P 153765-72-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, as carcinostatic and virucide and immunosuppressant
}

RN 145383-45-5 HCAPLUS

CN 3-Pyridinecarboxylic acid, 6-(3,5-di-O-benzoyl-2-deoxy-.alpha.-D-erythro-pentofuranosyl)-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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RN 153765-72-1 HCAPLUS

CN 3-Pyridinecarboxylic acid, 6-(2-deoxy-.alpha.-D-erythro-pentofuranosyl)-(9CI) (CA INDEX NAME)

IT 93-60-7, Methyl nicotinate 153765-71-0

RL: RCT (Reactant)

(reaction of, with deoxyribohexonate)

RN 93-60-7 HCAPLUS

CN 3-Pyridinecarboxylic acid, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N \\ \hline \\ C-\text{OMe} \\ \parallel \\ O \end{array}$$

CN

RN 153765-71-0 HCAPLUS

3-Pyridinecarboxylic acid, methyl ester, (1S)-7,7-dimethyl-2-oxobicyclo[2.2.1]heptane-1-methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 3144-16-9

CMF C10 H16 O4 S

CDES \*

Absolute stereochemistry. Rotation (+).

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CM 2

CRN 93-60-7 CMF C7 H7 N O2

$$\begin{array}{c|c} & & \\ & &$$

L28

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ANSWER 37 OF 54 HCAPLUS COPYRIGHT 2002 ACS
    1994:86430 HCAPLUS
AN
DN
    120:86430
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TI $\hbox{\it Dry compositions for preparing submicron emulsions}$ 

IN Friedman, Doron; Aldouby, Yanir

PΑ Pharmos Corp., USA

SO PCT Int. Appl., 41 pp.

CODEN: PIXXD2

 $\mathbf{DT}$ Patent

LA FAN.		glish 1																	
	PA'	CENT	NO.		KI!	KIND DATE				APPLICATION NO.					DATE				
ΡI	WO	9315																	
		W:					CA, SK,		FI,	HU,	JP,	KR,	LK,	MG,	MN,	MW,	NO,	NZ,	
		R₩:		-	-	-	•		FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	
			BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	ML,	MR,	SN,	TD,	$\mathtt{TG}$				
		1010													1992				
	US	5472	706		Α		1995	1205		US	3 19	93-1	6913		1993	0212			
	ΑU	9337	215		A.	1	1993	0903		Αl	J 19	93-3	7215		1993	0217			
	ΑU	6759	30		B	2	1997	0227											
	EΡ	6268	50		A.	1	1994	1207		E	19	93-9	0602	4	1993	0217			
	ΕP	6268	50		B	1	2002	0515											
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙE,	IT,	LI,	LU,	MC,	NL,	PT,	SE
	JΡ	0850	6081		T	2	1996	0702		JI	19	93-5	1434	0	1993	0217			
	zA	9301	143		Α		1993	0914		ZP	19	93-1	143		1993	0218			
	US	5750	142		Α		1998	0512		US	19	97-8	4017	7	1997	0411			
PRAI	IL	1992	-1010	007	Α		1992	0218											
	US	1993	-169	13	Α		1993	0212											
		1993																	

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US 1995-486791 B1 19950607

Dry and stable compns. which can be reconstituted to form pharmaceutical or cosmetic emulsions having mean droplet size of 0.05-0.5.mu.m are disclosed. The lyophilized dry compn. comprise an amino compd. 40-90, an emulsifier 0.1-20, and an oil 0.2-40%. A submicron emulsion was prepd. by mixing 4.25% medium-chain triglyceride oil, 0.75% lecithin, 0.02% .alpha.-tocopherol, 2% Pluronic F-68, 1.5% Na deoxycholate and water to 100%. The emulsion was homogenized and dild. with water to yield an oil concn. of 0.5% prior to lyophilization and glycine was added to achieve concn. of 6%, then lyophilized. The lyophilized emulsion was reconstituted with water to obtain an iso-osmolar emulsion with mean droplet-size of 0.28.mu.m.

IT 98-92-0, Niacinamide

RL: BIOL (Biological study)

(lyophilized submicron emulsions contg.)

RN 98-92-0 HCAPLUS

CN 3-Pyridinecarboxamide (9CI) (CA INDEX NAME)

L28 ANSWER 38 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 1993:52491 HCAPLUS

DN 118:52491

TI Prevention and early therapy of IDDM (insulin-dependent diabetes mellitus)

AU Yamada, Kentaro

CS Med. Sch., Kurume Univ., Kurume, Japan

SO Pharma Med. (1992), 10(8), 53-7 CODEN: PMEDEC; ISSN: 0289-5803

DT Journal; General Review

LA Japanese

AB A review, with 14 refs., on new approaches in prevention and early therapy of IDDM, by using immunosuppressants (e.g. cyclosporin, glucocorticoids, etc.), nicotinamides, and insulin.

IT 98-92-0, Nicotinamide

RL: BIOL (Biological study)

(in diabetes prevention and early therapy)

RN 98-92-0 HCAPLUS

CN 3-Pyridinecarboxamide (9CI) (CA INDEX NAME)

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L28 ANSWER 39 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 1992:214352 HCAPLUS

DN 116:214352

TI Preparation of 2,4- and 2,5-substituted pyridine N-oxides as fibrosuppressive and immunosuppressive agents

IN Baader, Ekkehard; Bickel, Martin; Guenzler-Pukall, Volkmar

PA Hoechst A.-G., Germany

SO Eur. Pat. Appl., 26 pp.

CODEN: EPXXDW

DT Patent

LA German

FAN.CNT 1

FAN.	CNT 1	L ENT NO.	KIND	DATE		AP	PLICATION NO.	DATE
PI				19920102		EP	1991-110343	19910622
	EP 4	163592	В1	19940817				
					FR,		GR, IT, LI, LU	
		1020570	A1	19920102			1990-4020570	
		2061118	Т3	19941201			1991-110343	
		9103118	Α	19911229		FI	1991-3118	19910626
		L01070	В	19980415				
		98629	A1	19960514			1991-98629	
		283782	В6	19980617			1991-1959	19910626
	CA 2	2045868	AA	19911229		CA	1991-2045868	19910627
	NO 9	9102541	Α	19911230		ИО	1991-2541	19910627
	NO 1	L78026	В	19951002				
	NO 1	L78026	С	19960110				
	AU 9	9179356	A1	19920102		AU	1991-79356	19910627
	AU 6	536990	B2	19930513				
	CN 1	L057649	Α	19920108		CN	1991-104308	19910627
	CN 1	L038585	В	19980603				
	BR 9	9102699	A	19920204		BR	1991-2699	19910627
	ZA 9	9104958	Α	19920325		zA	1991-4958	19910627
	HU 5	59104	A2	19920428		HU	1991-2158	19910627
	HU 2	214627	В	19980428				
	JP C	)4230264	A2	19920819		JP	1991-156562	19910627
	JP C	8032687	В4	19960329				
	US 5	5260323	Α	19931109		US	1992-978467	19921119
	LV 1	10431	В	19960220		LV	1993-284	19930504
	LT 3	3918	В	19960425		LT	1993-1464	19931112
PRAI	DE 1	990-4020570		19900628				
		.991-721681		19910626				
os	MARE	AT 116:21435	2					
GI								

$$\begin{array}{c|cccc}
R^2 & & & & \\
N & & \\
N & & \\
N & & \\
N & & \\
N & & \\
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AB Title compds. I [R1 = COXR3; X = O, NR; R3 = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heteroaryl, etc.; R = R3 or NRR3 = Q; n = 1-3; A = O, S, CH2, NR7; R7 = H, (substituted) Ph, alkyl, alkenyl, alkynyl, alkoxycarbonyl, cycloalkyl; R2 = COXR3; with provisos] were prepd. as proline- and lysine hydroxylase inhibitors useful as fibrosuppressive and immunosuppressive agents. Thus, N-oxidn. of 1 g bis[N,N'-2-methoxyethyl)pyridine-2,4-dicarboxamide by 0.62 g m-chloroperbenzoic acid gave 620 mg of the bis(N,N'-2-methoxyethyl)pyridine-2,4-dicarboxamide N-oxide (II). II was tested as a proline hydroxylase inhibitor.

IT 117517-21-2 139994-18-6

RL: RCT (Reactant)

(N-oxidn. of, by chloroperbenzoic acid, in prepn. of fibrosuppressive and immunosuppressive agents)

RN 117517-21-2 HCAPLUS

CN 2,5-Pyridinedicarboxamide, N,N'-diethyl- (9CI) (CA INDEX NAME)

RN 139994-18-6 HCAPLUS

CN 2,5-Pyridinedicarboxamide, N,N'-bis(3-methoxypropyl)- (9CI) (CA INDEX NAME)

MeO- (CH<sub>2</sub>)<sub>3</sub>-NH-C N 
$$C$$
-NH- (CH<sub>2</sub>)<sub>3</sub>-OMe

IT 139994-07-3P 139994-08-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as fibrosuppressive and immunosuppressive agent)

RN 139994-07-3 HCAPLUS

CN 2,5-Pyridinedicarboxamide, N,N'-diethyl-, 1-oxide (9CI) (CA INDEX NAME)

RN 139994-08-4 HCAPLUS

CN 2,5-Pyridinedicarboxamide, N,N'-bis(3-methoxypropyl)-, 1-oxide (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & O \\ \parallel & \parallel \\ C-NH-(CH_2)_3-OMe \end{array}$$
 MeO-(CH<sub>2</sub>)<sub>3</sub>-NH-C

L28 ANSWER 40 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 1989:229997 HCAPLUS

DN 110:229997

TI Binding of organic acids to surface receptors of lymphocytes as an immunosuppressive mechanism in uremia

AU Sanaka, Tsutomu; Hayasaka, Yutaro; Kawashima, Yoichiro; Takuma, Takehide; Sugino, Nobuhiro; Ota, Kazuo; Gulyassy, Paul F.

CS Kidney Cent., Tokyo Women's Med. Coll., Tokyo, Japan

SO Adv. Exp. Med. Biol. (1987), 223(Uremic Toxins), 165-9 CODEN: AEMBAP; ISSN: 0065-2598

DT Journal

LA English

AB Org. acids (protein-binding inhibitors, PB-Ix) from blood of a renal failure patient probably bind to the surface of lymphocytes and exert inhibitory effects on mitogen receptors and Leu4 and HLA-DR antigens.

IT 89-00-9, Quinolinic acid

RL: BIOL (Biological study)

(lymphocytes response to, immunosuppression by

protein-binding inhibitors in blood of humans in uremia in relation to)

RN 89-00-9 HCAPLUS

CN 2,3-Pyridinedicarboxylic acid (8CI, 9CI) (CA INDEX NAME)

L28 ANSWER 41 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 1988:87738 HCAPLUS

DN 108:87738

TI Studies on the sesquiterpene alkaloids of Tripterygium wilfordii Hook. F

AU Deng, Fuxiao; Cao, Jianhong; Xia, Zhilin; Lin, Sui; Wang, Xiaoyi

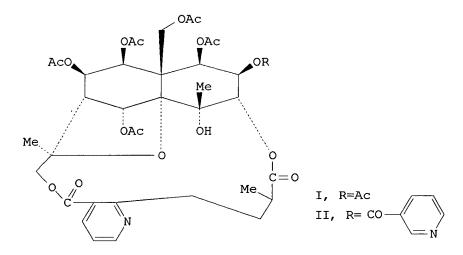
CS Fujian Inst. Med. Sci., Fuzhou, Peop. Rep. China

SO Zhiwu Xuebao (1987), 29(5), 523-6 CODEN: CHWHAY; ISSN: 0577-7496

DT Journal

LA Chinese

GI



AB Euonine (I) was isolated from the roots of T. wilfordii. A new sesquiterpene alkaloid, named wilfornine (II), was also isolated. Both I and II had immunosuppressive activities in mice.

IT 112899-84-0

RL: BIOL (Biological study)

(of Tripterygium wilfordii, isolation of and immunosuppression from)

RN 112899-84-0 HCAPLUS

CN 3-Pyridinecarboxylic acid, (8R,9R,10R,11S,12S,13R,14R,15S,18S,21S,22R,23R)-10,13,22,23-tetrakis(acetyloxy)-12-[(acetyloxy)methyl]-

7,8,9,10,12,13,14,15,17,18,19,20-dodecahydro-21-hydroxy-8,18,21-trimethyl-

7,8,9,10,12,13,14,15,17,18,19,20-dodecanydro-21-hydroxy-8,18,21-trimethyl-5,17-dioxo-8,11-epoxy-9,12-ethano-11,15-methano-5H,11H-

[1,9]dioxacyclooctadecino[4,3-b]pyridin-14-yl ester (9CI) (CA INDEX NAME)

L28 ANSWER 42 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 1986:454617 HCAPLUS

DN 105:54617

TI Pyridine-2,4- and 2,5-dicarboxylic acid esters as drugs for inhibition of proline and lysine hydroxylase

IN Guenzler, Volkmar; Hanauske-Abel, Hartmut; Mohr, Juergen; Tschank, Georg; Kivirikko, Kari; Majamaa, Kari; Brocks, Dietrich

PA Hoechst A.-G., Fed. Rep. Ger.

SO Ger. Offen., 7 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

FAN.	CNT	1							
	PA!	TENT NO.		KIND	DATE		AP	PLICATION NO.	DATE
ΡI	DE.	 3432094		 A1	19860306		DE.	1984-3432094	19840831
		176741		A1	19860409			1985-110498	
					19881026		111	1903-110490	19030021
	EP	176741		B1					
		R: AT,	BE,	CH, DE	, FR, GB,	IT,	LI,	LU, NL, SE	
	AT	38222		E	19881115		AТ	1985-110498	19850821
	ES	546527		A1	19860716		ES	1985-546527	19850829
	US	4717727		Α	19880105		US	1985-770676	19850829
	DK	8503977		Α	19860301		DK	1985-3977	19850830
	DK	166127		В	19930315				
	DK	166127		С	19930809				
	AU	8546928		<b>A</b> 1	19860306		AU	1985-46928	19850830
	AU	588826		B2	19890928				
	JP	61060655		A2	19860328		JP	1985-189996	19850830
	JP	06041412		B4	19940601				
	ZA	8506646		Α	19860528		ZA	1985-6646	19850830
	CA	1246456		A1	19881213		CA	1985-489741	19850830
PRAI	DE	1984-3432	094		19840831				
	ΕP	1985-1104	98		19850821				
							_		

AB The title alkyl esters are inhibitors of proline and lysine hydroxylases

useful as antifibrotics and immunosuppressants and for treatment of disorders in collagen metab. and complement Clq formation. For example, di-Et pyridine-2,4-dicarboxylate at 10 .mu.M caused 70% inhibition of conversion of proline-14C to hydroxyproline-14C in the collagen of isolated calvaria, compared to 50% inhibition at 670 .mu.M for the free acid.

## IT 1678-52-0 5552-44-3

RL: BIOL (Biological study)

(as antifibrotic and immunosuppressant, lysine and proline hydroxylase inhibition in relation to)

RN 1678-52-0 HCAPLUS

CN 3,4-Pyridinedicarboxylic acid, diethyl ester (7CI, 8CI, 9CI) (CA INDEX NAME)

RN 5552-44-3 HCAPLUS

CN 2,5-Pyridinedicarboxylic acid, diethyl ester (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

IT 100-26-5D, alkyl esters

RL: BIOL (Biological study)

(as antifibrotics and **immunosuppressants**, lysine and proline hydroxylase inhibition in relation to)

RN 100-26-5 HCAPLUS

CN 2,5-Pyridinedicarboxylic acid (8CI, 9CI) (CA INDEX NAME)

L28 ANSWER 43 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 1985:154808 HCAPLUS

DN 102:154808

TI Immunoregulating formulations containing chroman derivatives

PA Kuraray Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI GT	JP 59222414	A2	19841214	JP 1983-97596	19830531

$$\begin{array}{c} \text{Me} \\ \text{HO} \\ \text{Me} \\ \text{O} \\ \text{CH}_2 \text{ (CH}_2\text{CH} = \text{CMeCH}_2) }_{n}\text{H} \end{array}$$

AB Immunoregulating formulations contain chroman compds. I where n = 5.apprx.9. Thus, 2,5,7,8-tetramethyl-2-(4,8,12,16,20,24-hexamethylpentacosa-3,7,11,15,19,23-hexaen-1-yl)-6-cromanol (II) [95653-38-6] 10, beeswax 1, hydroxypropyl cellulose 3, cryst. cellulose 30, lactose 30, corn starch 20, and CM cellulose Ca 5 g were mixed with 30 mL H2O and made into tablets (100 mg/tablet). Methods for the prepn. of a no. of I are described. E.g., 2,3,5-trimethylhydroquinone [700-13-0] was treated with 3,7,11,15,19,23,27-heptamethyloctacosa-1,6,10,14,18,22,26-heptaen-3-ol [95653-47-7] in the presence of BF3.0Et2 to give II.

Ι

IT 95653-50-2P

RL: PREP (Preparation)

(prepn. of, for immunosuppressant formulations)

RN 95653-50-2 HCAPLUS

CN 3-Pyridinecarboxylic acid, 3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12,16,20-pentamethyl-3,7,11,15,19-heneicosapentaenyl)-2H-1-benzopyran-6-yl ester (9CI) (CA INDEX NAME)

PAGE 1-A

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PAGE 1-B

L28 ANSWER 44 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 1985:154807 HCAPLUS

DN 102:154807

TI Immunosuppressant formulations containing chroman derivatives

PA Kuraray Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI GI	JP 59222415	A2	19841214	JP 1983-97597	19830531

- AB Immunosuppressant formulation contain chroman derivs. I (R = C1-11 alkyl). Thus, 2,5,7,8-tetramethyl-2-(4,8-dimethylnonyl)-6-chromanol (II) [16171-35-0] 10, beeswax 1, hydroxypropyl cellulose 3, cryst. cellulose 30, lactose 30, corn starch 20, and CM cellulose Ca 5 g were mixed with 30 mL H2O and made into tablets (100 mg/tablet). Methods for the prepn. of several I compds. are described. E.g., II was prepd. by the reaction of 2,3,5-trimethylhydroquinone [700-13-0] with 3,7,11-trimethyldodec-2-enyl bromide [95653-63-7] in the presence of an acid catalyst.
- IT 95653-59-1P

RL: PREP (Preparation)

Ι

(prepn. of, for immunosuppressant pharmaceuticals)

RN 95653-59-1 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-(4,8-dimethylnonyl)-3,4-dihydro-2,5,7,8-tetramethyl-2H-1-benzopyran-6-yl ester (9CI) (CA INDEX NAME)

Me Me 
$$C = 0$$
 Me  $C = 0$  Me  $C =$ 

L28 ANSWER 45 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 1983:83761 HCAPLUS

DN 98:83761

TI Influence of dexamethasone phosphate on DNA- and NAD-metabolism of concanavalin A stimulated T-lymphocytes

AU Kroeger, H.; Grahn, H.

CS Robert Koch-Inst., Berlin, D-1000, Fed. Rep. Ger.

SO Int. J. Biochem. (1983), 15(2), 211-15

CODEN: IJBOBV; ISSN: 0020-711X

DT Journal

LA English

GΙ

The effects of dexamethasone (I) [50-02-2] was examd. on the DNA and the AΒ NAD [53-84-9] metab. in T-lymphocytes of mice stimulated by Con A [11028-71-0]. nicotinamide [98-92-0] Increases the incorporation of [3H]thymidine into the DNA of T-cells depending on the concn. There is a similar but less pronounced effect with 1-methylnicotinamide [3106-60-3]. I, 10-9M, inhibits the incorporation of [3H]thymidine into DNA. The incorporation of [3H] thymidine into the DNA is reduced after preincubation of the T-cells with 6-aminonicotinamide [329-89-5] or with acetylpyridine [30440-88-1]. I, decreases the content of NAD in the T-cells. The activity of the ADPR transferase [70712-49-1] increases after addn. of Con A. Presence of nicotinamide stimulates the effect of Con A on this enzyme. This is not the case with 1-methylnicotinamide. The enzyme is inhibited drastically by I. Apparently, NAD-adenoribosylation metab. is markedly influenced by the mitogen Con A and by I.

IT 329-89-5

RL: BIOL (Biological study)
(DNA formation by T-lymphocyte inhibition by, dexamethasone in relation to)

RN 329-89-5 HCAPLUS

CN 3-Pyridinecarboxamide, 6-amino- (9CI) (CA INDEX NAME)

IT 98-92-0 3106-60-3

RL: BIOL (Biological study)
 (DNA formation by T-lymphocyte stimulation by, dexamethasone in relation to)

RN 98-92-0 HCAPLUS

CN 3-Pyridinecarboxamide (9CI) (CA INDEX NAME)

RN 3106-60-3 HCAPLUS

CN Pyridinium, 3-(aminocarbonyl)-1-methyl- (9CI) (CA INDEX NAME)

IT 53-84-9

RL: BIOL (Biological study)
(metab. of DNA and, by T-lymphocyte, Con A and dexamethasone effect on)

RN 53-84-9 HCAPLUS

CN Adenosine 5'-(trihydrogen diphosphate), P'.fwdarw.5'-ester with 3-(aminocarbonyl)-1-.beta.-D-ribofuranosylpyridinium, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L28 ANSWER 46 OF 54 HCAPLUS COPYRIGHT 2002 ACS

AN 1978:400554 HCAPLUS

DN 89:554

TI Study of the effect of immunosuppressants on the interrelation of nucleic acids and nicotinamide nucleotides in rheumatic tissues

AU Miskinyte, G.; Jusiene, J.; Astrauskas, V.

CS Inst. Eksp. Klin. Med., Vilnius, USSR

SO Mater. Biokhim. Konf. Pribalt. Resp. B. SSR, 5th (1976), Volume 1, 84-5. Editor(s): Sibul, I. K. Publisher: Akad. Nauk Est. SSR, Tallinn, USSR. CODEN: 38BKAW

DT Conference

LA Russian

AB In rabbits with exptl. arthritis, plasma nucleic acid levels were decreased; the concn. of RNA and DNA in the spleen were unaffected. Treatment with cyclophosphane [50-18-0] plus azathioprine [446-86-6] (10 mg/kg, each) or with 20 mg/kg of either compd. alone decreased DNA; only azathioprine alone decreased RNA. Cyclophosphane plus azathioprine or cyclophosphane alone increased NAD [53-84-9] and NADP [53-59-8], azathioprine decreased both nicotinamide nucleotides. In livers of arthritic rabbits, RNA and DNA concns. were increased and NAD and NADP concns. were decreased. The immunosuppressants had no effect on DNA; RNA was increased by either compd. alone or by the combined treatment. The immunosuppressants decreased nicotinamide nucleotides when given together or sep.

IT 53-59-8 53-84-9

RL: BIOL (Biological study)

(of liver and spleen, in arthritis, immunosuppressant effect
on)

RN 53-59-8 HCAPLUS

CN Adenosine 5'-(trihydrogen diphosphate), 2'-(dihydrogen phosphate), P'.fwdarw.5'-ester with 3-(aminocarbonyl)-1-.beta.-D-ribofuranosylpyridinium, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.